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**SIXTIETH ANNUAL
REPORT**

Board of Education

CITY OF CHICAGO

FOR THE YEAR ENDED JUNE 30, 1914

CENTER ENTRANCE
CARTER H. HARRISON TECHNICAL HIGH SCHOOL.
Marshall and W. Twenty-fourth Boulevards,
Chicago.

**PUBLIC SCHOOLS
OF THE
CITY OF CHICAGO**

**SIXTIETH
ANNUAL REPORT**

OF THE



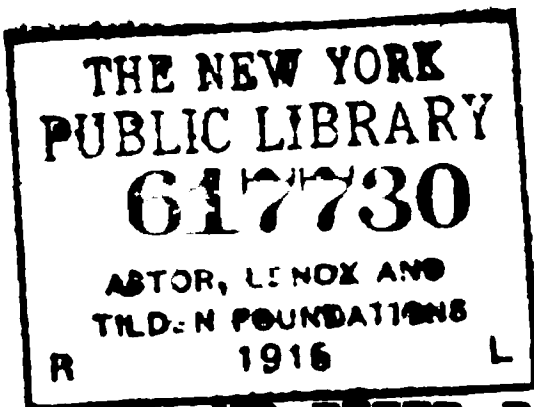
Board of Education

FOR THE

YEAR ENDED JUNE 30, 1914.

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THE BOARD OF EDUCATION
OF THE CITY OF CHICAGO**



BOARD OF EDUCATION—1913-1914.

Officers.

MR. PETER REINBERG.....President
MR. HENRY W. HUTTMANN (July 1 to December 17, 1913)....Vice-Pres.
MR. JOHN W. ECKHART (January 7 to February 25, 1914)....Vice-Pres.
MR. LEWIS E. LARSON.....Secretary

Membership.

(6) **MR. D. R. CAMERON**, 15 W. Lake Street.....1916
 MR. PETER REINBERG, 5440 N. Robey Street.....1916
 DEAN WALTER T. SUMNER, 117 N. Peoria Street.....1915
(7) **MR. JULIUS F. SMLETANKA**, R. 610. 69 W. Washington Street.....1915
(1) **MR. JOHN C. HARDING**, R. 222, Postal Telegraph building.....1914
(2) **MR. CHARLES O. SETHNESS**, 718 N. Curtis Street.....1914
(3) **MR. HARRY A. LIPSKY**, 1214 S. Halsted Street.....1914
 MRS. JOHN MACMAHON, 5426 East Park View, 3rd apartment.....1914
 MR. JACOB M. LOEB, R. 1737, 175 W. Jackson Boulevard.....1914
(4) **MR. JAMES B. DIBELKA**, R. 640, 29 S. La Salle Street.....1914
(5) **MR. HENRY W. HUTTMANN**, 111 W. Monroe Street.....1914
 MR. JOHN J. SONSTEBY, R. 605, 19 S. La Salle Street.....1915
(8) **MR. THOMAS KELLY**, 3622 S. Western Avenue.....1915
 MR. WILLIAM ROTHMANN, R. 1340, 38 S. Dearborn Street.....1915
 DR. OTTO F. WARNING, R. 908, 8 N. State Street.....1916
 MR. ROBERT J. ROULSTON, 436 W. 61st Place.....1915
 MR. MICHAEL J. COLLINS, R. 1553 Railway Exchange Building.....1916
 MR. CHARLES S. PETERSQN, 531 Plymouth Place.....1915
 MRS. GEORGE R. YOSBINK, 4846 Forestville Avenue.....1916
 MRS. GERTRUDE HOWE BRITTON, 800 S. Halsted Street (Hull House)..1916
 DR. PETER C. CLEMENSEN, 8156 Elys Avenue.....1916

- (1) Mayor reported acceptance of resignation on December 17, 1913.
 Succeeded by **Mr. John A. Metz**, 6406 Emerald Avenue.
(2) Mayor reported acceptance of resignation on December 17, 1913.
 Succeeded by **Mr. Axel A. Strom**, 6039 Sheridan Road.
(3) Mayor reported acceptance of resignation on December 17, 1913.
 Succeeded himself.
(4) Mayor reported acceptance of resignation on December 17, 1913.
 Succeeded by **Mr. Joseph A. Holpuch**, 3734 W. 26th Street.
(5) Mayor reported acceptance of resignation on December 17, 1913.
 Succeeded by **Mr. John W. Eckhart**, 311 N. Carpenter Street.
(6) **Mr. Daniel R. Cameron**, resigned December 31, 1913.
 Succeeded by **Mr. Ralph C. Otis**, 7 W. Madison Street.
(7) **Mr. Julius F. Smletanka**, resigned June, 1914.
 Succeeded by **Dr. Stephen R. Pietrowicz**, 2134 Pierce Avenue.
(8) **Mr. Thomas Kelly**, died June 10, 1914.
 Succeeded by **Mr. John A. Metz**, 6406 Emerald Avenue.

Under Judgment of Ouster of the Superior Court of Cook County, February 25, 1914, the following named persons retook their positions as members of the Board of Education:

Mr. John C. Harding in place of **Mr. John A. Metz**.
 Mr. Charles O. Sethness in place of **Mr. Axel A. Strom**.
 Mr. James B. Dibelka in place of **Mr. Joseph A. Holpuch**.
 Mr. Henry W. Huttman in place of **Mr. John W. Eckhart**.

STANDING COMMITTEES—1913-1914.

(The President is a member ex-officio of all Standing Committees.)

APPOINTMENTS FROM JULY, 1913, TO JANUARY, 1914.

SCHOOL MANAGEMENT—Dean Sumner, Chairman; Messrs. Cameron, Smietanka, Lipsky, Mrs. MacMahon, Messrs. Loeb, Peterson, Mrs. Vosbrink, Mrs. Britton and Dr. Clemensen.

BUILDINGS AND GROUNDS—Mr. Sethness, Chairman; Messrs. Harding, Huttman, Diebelka, Rothmann, Kelly, Sonsteby, Dr. Warning, Messrs. Collins and Roulston.

FINANCE—Mr. Rothmann, Chairman; Messrs. Kelly, Sonsteby and Roulston.
Chairman, Committee on School Management.
Chairman, Committee on Buildings and Grounds.

SOCIAL CENTERS—Dean Sumner, Chairman; Mr. Lipsky, Mrs. MacMahon, Mrs. Britton, Dr. Young, member ex-officio. (Committee was abolished October 1, 1913.)

LEASES—Mr. Lipsky, Chairman; Messrs. Huttman, Loeb, Diebelka and Peterson.

RULES—Mr. Harding, Chairman; Messrs. Rothmann, Huttman and Sethness, heads of departments, advisory.

COMMERCIAL EDUCATION—Mr. Sonsteby, Chairman; Messrs. Huttman, Roulston, Sethness and Peterson. (Committee was discharged October 15, 1913.)

APPOINTMENTS FROM JANUARY, 1914, TO JULY, 1914.

SCHOOL MANAGEMENT—Mrs. MacMahon, Chairman; Mr. Smietanka, Dean Sumner, Messrs. Loeb, Peterson, Mrs. Vosbrink, Mrs. Britton, Mr. Lipsky, Dr. Clemensen, Mr. Otis; President, ex-officio.

BUILDINGS AND GROUNDS—Mr. Collins, Chairman; Messrs. Rothmann, Kelly, Roulston, Sonsteby, Dr. Warning, Messrs. Metz, Strom, Holpuch, Eckhart; President, ex-officio.

FINANCE—Mr. Peterson, Chairman; Messrs. Kelly, Sonsteby, Rothmann, Dean Sumner, Mrs. Britton, Mrs. Vosbrink, Dr. Clemensen.
Chairman, Committee on School Management.
Chairman, Committee on Buildings and Grounds.
President, ex-officio.

LEASES—Mr. Lipsky, Chairman; Messrs. Smietanka, Collins, Eckhart, Strom; President, ex-officio.

RULES—Mr. Loeb, Chairman; Mr. Otis, Dr. Warning, Mr. Metz, heads of departments, advisory.

On May 13, 1914, the President announced he had placed Messrs. Huttman, Diebelka, Sethness and Harding on the Committee on Buildings and Grounds, and on any other committees upon which they had served. (See list of membership and Judgment of Ouster on preceding page.)

1913-1914

SUPERINTENDENTS AND SUPERVISORS.

DR. ELLA FLAGG YOUNG.....Superintendent of Schools
JOHN D. SHOOP.....First Assistant Superintendent, R. 820

District Superintendents.

District No. 1ELLA C. SULLIVAN, R. 830
District No. 2WILLIAM C. DODGE, R. 830
District No. 3CHARLES D. LOWRY, R. 830
District No. 4RUFUS M. HITCH, R. 830
District No. 5HENRY C. COX, R. 830
District No. 6KATE S. KELLOGG, R. 830
District No. 7EDWARD C. ROSSETER, R. 830
District No. 8GERTRUDE E. ENGLISH, R. 830
District No. 9ORVILLE T. BRIGHT, R. 830
District No. 10.....MINNIE R. COWAN, R. 830
In charge of Evening and Vocational Schools
WILLIAM M. ROBERTS, R. 830
In charge of Special Divisions.....SAMUEL B. ALLISON, R. 830

W. L. BODINE....Superintendent of Compulsory Education, R. 626
PETER A. MORTENSON...Superintendent of Parental School, R. 806
WILLIAM H. CAMPBELL.....Examiner
JOHN B. CURTIS.....Supervisor Schools for Blind
HENRY SUPER.....Supervisor Physical Education
ROBERT M. SMITH.....Supervisor Technical Work in High Schools
IDA M. COOK.....Supervisor of Household Arts
MARTIN SCHMIDHOFFER.....Supervisor of German
EDWARD F. WORST..Supervisor of Elem. Man. Training and Const.
DANIEL P. MACMILLAN : : : : :Supervisor of Scientific Pedagogy and Child Study
WILLIAM BACHRACH : : : : :Supr. of Commercial Work in High Schools

BUSINESS EMPLOYEES.

CHARLES N. FESSENDEN.....Assistant Secretary
JOHN A. GUILFORD.....Business Manager
JOSEPH J. MAGRADY.....Superintendent of Repairs
*FRED VOGT.....Auditor
ARTHUR F. HUSSANDER.....Architect
NORMAN L. PATTERSON (to Dec. 16, 1913)....Acting Chief Engineer
JOHN HOWATT (appointed Dec. 16, 1913).....Chief Engineer
ANGUS ROY SHANNON.....Attorney
RICHARD S. FOLSOM.....General Counsel

* Died February 17, 1914.

NORMAL, PRACTICE, PARENTAL AND HIGH SCHOOLS.

**CHICAGO NORMAL COLLEGE.
CARTER PRACTICE SCHOOL.
HAINES PRACTICE SCHOOL.
PARKER PRACTICE SCHOOL.
PARENTAL SCHOOL.**

High Schools.

Austin,	Harrison Technical,	Medill,
Bowen,	Hyde Park,	Parker,
Calumet,	Lake,	Phillips,
Crane Technical,	Lake View,	Schurz,
Curtis,	Lane Technical,	Senn,
Englewood,	Marshall,	Tuley,
Flower Technical,	McKinley,	Waller.

SCHOOL DISTRICT COMMITTEES—1913-1914.

Changes were made May 2, 1913, as follows:

District No. 1— Mr. Reinberg, Mr. Sethness and Mr. Peterson.	District No. 8— Mr. Dibelka, Mr. Harding and Dr. Warning.
District No. 2— Mrs. Britton, Mr. Cameron and Mr. Peterson.	District No. 9— Mr. Smietanka, Mr. Lipsky and Mr. Loeb.
District No. 3— Mr. Sonsteby, Mr. Reinberg and Mr. Cameron.	District No. 10— Mr. Huttman, Mrs. MacMa- hon and Mr. Kelly.
District No. 4— Mrs. Britton, Mr. Lipsky and Mrs. Vosbrink.	District No. 11— Mr. Huttman, Mrs. MacMa- hon and Mr. Kelly.
District No. 5— Dean Sumner, Mr. Sonsteby and Mr. Collins.	District No. 12— Mrs. Vosbrink, Mr. Rothmann and Mr. Roulston.
District No. 6— Mr. Debelka, Mr. Harding and Mr. Sethness.	District No. 13— Dr. Clemensen, Mr. Rothmann and Mr. Roulston.
District No. 7— Dean Sumner, Dr. Warning and Mr. Collins.	District No. 14— Mr. Smietanka, Dr. Clemensen and Mr. Loeb.

SCHOOL DISTRICT COMMITTEES—1913-1914.

DISTRICT No. 1.

COMMITTEE.

MR. SETHNESS, MR. PETERSON, AND MR. REINBERG.

Audubon,	Greeley,	Morris,	Stewart,
Blaine,	Hamilton,	Nettelhorst,	Swift,
Burley,	Hawthorne,	Peirce (Site),	Thorp, Ole A.,
Coonley,	Hayt,	Ravenswood,	Trumbull,
Field,	Jahn,	Reilly (Site),	Waters,
Goudy,	McPherson,	Schneider,	

DISTRICT No. 2.

COMMITTEE.

MR. CAMERON, MR. PETERSON, AND MRS. BRITTON.

Agassiz,	Headley,	Lincoln,	Ogden.
Alcott,	Kinzie,	Manierre,	Prescott.
Armstrong,	Knickerbocker,	Mulligan,	Sheldon,
Arnold,	La Salle,	Newberry,	Thomas.

DISTRICT No. 3.

COMMITTEE.

MR. SONSTEBY, MR. CAMERON, AND MR. REINBERG.

Adams,	Kosciuszko,	Schiller,	Wells.
Carpenter,	Motley,	Sexton,	
Franklin,	Otis,	Talcott,	
Jenner,	Peabody,	Washington,	

DISTRICT No. 4.

COMMITTEE.

MR. LIPSKY, MRS. BRITTON, AND MRS. VOSBRINK.

Anderson,	Columbus,	Langland,	Sabin (Site),
Burr,	Drummond,	Logan,	Schley,
Chase,	Goethe,	Mitchell,	Wicker Park.
Chopin (Site),	La Fayette,	Pulaski,	

DISTRICT No. 5.

COMMITTEE.

DEAN SUMNER, MR. SONSTEBY, AND MR. COLLINS.

Avondale,	Cleveland,	Keeler Avenue	Nobel,
Bancroft,	Darwin,	Linne,	Norwood Park,
Beaubien,	Dunning,	Lloyd,	Springfield Ave.
Beethoven	Gray,	Lowell,	Stowe.
(Site),	Hanson Park &	Mayfair,	Von Humboldt,
Belding,	Mont Clare,	Monroe,	Yates.
Bismarck,	Haugan,	Moos,	
Brentano,	Henry,	Mozart,	
Cameron,	Irving Park,	Nixon,	

DISTRICT No. 6.

COMMITTEE.

MR. DIBELKA, MR. HARDING, AND MR. SETHNESS.

Beidler,	Emmet,	Marshall,	Spencer,
Bryant,	Ericsson,	May,	Sumner,
Byford,	Hayes,	Morse,	Tennyson,
Calhoun,	Howe,	Nash,	Tilton.
Chalmers,	Key,	Ryerson,	
Emerson,	Lawson,	Shepard (Site).	

DISTRICT No. 7.

COMMITTEE.

DEAN SUMNER, DR. WARNING, AND MR. COLLINS.

Brainard,	Dore,	Jackson,	Montefiore,
Brown,	Gladstone,	Jefferson,	Scammon,
Crerar,	Goodrich,	King,	Skinner,
Dante,	Grant,	Marquette,	Spalding,
Delano,	Irving,	McLaren,	Tilden.

DISTRICT No. 8.

COMMITTEE.

MR. DIBELKA, MR. HARDING, AND DR. WARNING.

Albany Avenue,	Froebel,	McCormick,	Smyth,
Burns,	Gary,	Medill,	Spry,
Clarke,	Hammond,	Penn	Whitney,
Cooper,	Herzl,	Pickard,	Whittier,
Corkery,	Howland,	Plamondon,	Worthy.
Farragut,	Jirka,	Rogers,	

DISTRICT No. 9.

COMMITTEE.

MR. SMETANKA, MR. LIPSKY, AND MR. LOEB.

Brenan,	Haven,	Komensky,	Throop,
Foster,	Jones,	Sheridan, Mark,	Walsh,
Garfield,	Jungman,	Swing,	Washburne.

DISTRICT No. 10.

COMMITTEE.

MR. HUTTMANN, MRS. MACMAHON, AND MR. KELLY.

Armour,	* Fallon,	Mann,	Sixty-Second
Burroughs,	Gage Park,	McAllister,	Place,
Chicago Lawn,	Greene,	McClellan,	Ward,
Davis,	Healy,	Sawyer Avenue,	Webster,
Everett,	Holden,	Shields,	
Fallon,	Longfellow,		

* Schools for Crippled Children.

DISTRICT No. 11.

COMMITTEE.

MR. HUTTMANN, MRS. MACMAHON, AND MR. KELLY.

Colman,	Graham,	Hedges,	Parkman,
Dewey,	Hamline,	Hendricks,	Seward,
Earle,	Hancock,	Holmes,	Sherman,
Fulton,	Harper,	Libby,	Sherwood.

DISTRICT No. 12.

COMMITTEE.

MR. ROTHMANN, MR. ROULSTON, AND MRS. VOSBRINK.

Altgeld,	Copernicus,	Lewis-Champlin	Van Vlissingen,
Auburn Park,	Curtis,	Oglesby,	Wentworth,
Barnard,	Gresham,	Raster,	West Pullman,
Bass,	Harvard,	Ryder,	Yale,
Beale,	Kershaw,	Scanlan,	
Brownell,	Kohn,	Vanderpoel,	

DISTRICT No. 13.

COMMITTEE.

MR. ROTHMANN, MR. ROULSTON, AND DR. CLEMENSEN.

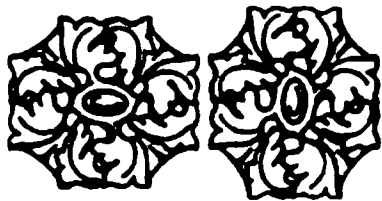
Bradwell,	Gallistel,	Poe,	Sheridan, Phil.
Burnside,	Kenwood,	Pullman,	Taylor,
Carter,	Kozminski,	Ray,	Thorp, J. N.
Clay,	Madison,	Revere,	University Ave.
Cornell,	McCosh,	Sexton, Austin O.	Wadsworth,
Fiske,	Park Manor,	(Site),	Warren.

DISTRICT No. 14.

COMMITTEE.

MR. SMIETANKA, MR. LOEB, AND DR. CLEMENSEN.

Bryn Mawr,	Farren,	Marsh,	Scott,
Burke,	Felsenthal,	Moseley,	Shakespeare,
Doolittle,	Forestville,	Oakland,	South Deering,
Douglas,	Fuller,	Parkside,	Sullivan,
Drake,	Keith,	Raymond,	Willard.



CARTER H. HARRISON TECHNICAL HIGH SCHOOL.
Marshall and W. Twenty-fourth Boulevards, Chicago.

PRESIDENT'S ANNUAL REPORT

To the Members of the Board of Education:

LADIES AND GENTLEMEN—In harmony with usual custom, and in compliance with the regulations which define the duties of the officers of the Board of Education, I submit to you a report of the more important phases of the administration of the public school system for the school year ended June 30, 1914.

To one who is not familiar with the scope and magnitude of the Chicago Public School System, it offers a field of unusual interest. The business transactions necessary for the expansion and maintenance of the educational system require a high order of ability in general and departmental management. The tangible assets of the Chicago Public Schools, including buildings, grounds and equipment, represent a value approximating \$58,000,000. For the maintenance, improvement and care of these properties large expenditures are continuously necessary. For the year ended July 1, 1914, the total expenditures were as follows:

Educational	\$12,137,631
Building	5,434,784
<hr/>	
TOTAL	\$17,572,415

The rapid growth of the city's population, together with the shifting of the residential quarters of people who represent various racial conditions, increases the difficulty of providing sufficient class-room accommodations for all of the children of the city. To provide for the uncertainties that grow out of these conditions, approximately two hundred portable buildings are distributed among the schools, and in outlying residential districts where the needs for additional class-room accommodations have been most urgent.

One hundred more portable buildings will have to be erected before next January. As a result of this policy the number of double divisions, which have restricted the attendance of many children to one-half of the school day, is materially reduced. It has been the purpose of the Board to provide as far as may be possible for a full school day privilege for every child of legal school age in the city.

NEW BUILDINGS.

During the year closed there have been completed and occupied three new elementary school buildings, representing a total seating capacity of 3,500 pupils. Besides these new structures, additions have been made to six buildings, representing a seating capacity of 2,700 pupils. Also, during the year the Carter H. Harrison Technical High School was completed and occupied. This is one of the largest buildings of its kind in the entire country, having a seating capacity of 3,000, and in appointment and equipment has few, if any, superiors among the schools of its kind in the United States. The wide range of subjects that will be included in the courses to be offered at this school will no doubt soon attract a patronage that will fill each department to its full capacity. The erection of these buildings and additions represents an expenditure of approximately \$2,413,000.

WIDER USE OF SCHOOL BUILDINGS.

There is a constantly growing sentiment favoring the wider use of the school plant for the benefit of the district and the neighborhood. Frequent appeals are received for the opening of school buildings in the evenings for organizations such as Neighborhood Improvement Associations, Parent-Teachers' Associations, Athletic Societies, Boy Scouts, and other organizations that are created for the purpose of social improvement and recreation. The calls of the people of the neighborhood for the use of the buildings for these purposes are such as should receive careful consideration.

It has been suggested that provision should be made for the opening of the school buildings for neighborhood assemblies on one or two evenings of the month on a date that would be mutually agreeable to the different social organizations of the district that would profit by the use of the buildings, and that for these evenings no charge should be made to the public or to the promoters. It is evident that upon this basis a plan of organization could be made effective.

The board is fully agreed that wider scope in the use of the buildings would bring a return other than money on the investment which the schools represent. The cost, however, makes imperative remedial legislation to permit an increase in the tax rate before this most worthy idea can be applied.

EVENING SCHOOLS.

There has been during the year a growing interest in the Evening Schools. The willingness of the people to avail themselves of the privileges offered by these schools gives encouraging assurance that expenditures in this department are fully justified. It is to be regretted that sufficient funds have not been at command to extend the sessions over a greater portion of the school year.

The benefits of these schools are apparent not only in the opportunities which they offer for increase in the measure of intelligence and efficiency of the young people of the neighborhood, but in the elevation of the moral tone of the community as well. There can be no doubt in the mind of the careful observer that the presence of an evening school or social center in a community serves to act as a deterrent against vandalism and other phases of misconduct.

In framing the future policies of the Board of Education full consideration should be given to the possibilities of continuing at least one or more of the evening schools through a longer period of the year. Their importance and benefits

give them high rank among the educational opportunities which are offered to the public.

CHILD LABOR.

Sentiment generally favoring enforcement in fact, rather than in the breach, of 16 years as the compulsory education age, goes hand in hand with several conditions demanding amendment of the Compulsory School Attendance, Parental School and Child Labor laws. Unfortunately domestic conditions would seem to make it advisable that employment, under certain restrictions, be permitted between 14 and 16 years outside of school hours.

The Parental School law should consistently provide 16 years as the maximum age of commitment, instead of 14 as at present, and the Child Labor law should be changed on the same ground of consistency. Reducing the earning opportunities of the child also would involve necessary change in the Mothers' Pension law which now recognizes employment after the age of 14 years.

Labor certificates now issued by the board and which become the property of the child should be the property of the board. Under the present statute the child gets a certificate that its possessor is of certain age and has certain educational qualifications. Scores of children report the certificates as lost. The possibilities of abuse are apparent. This contingency would be met if the certification was made to the employer and returned to the board's files when the employment ceases. At present the certificates are merchantable.

SITES INVESTIGATION.

A daily newspaper in January alleged in a series of news articles that a coterie of men had made unreasonable profits on sales of school sites to the Board, made possible by advance information, and that there was conspiracy to defraud.

The entire situation was thoroughly investigated. A joint committee of the City Council and the Board of Education was promptly organized and received the assistance of the Corporation Counsel's office and the Civil Service Commission, in addition to the services of a special attorney.

After nearly four months of painstaking inquiry the committee made its report, which is printed in full in the Board's proceedings of May 27, 1914. The fifteen findings include the following:

Eleventh—That no member of the City Council nor of the Board of Education nor any of their officers, employes or attorneys have in any manner been personally interested in the acquiring by the Board of any school property which has been investigated by this committee.

Twelfth—That no reliable testimony has been presented to the committee to support the charge that any member of the Board of Education has given out any "tip" or advance information to any person or persons for the purpose of enabling such persons to buy property with a view of selling it to the Board at a profit.

My object in thus referring to a closed incident, closed so far as the routine of the investigation is concerned, is to emphasize and personally attest the record. There was not even ground for suspicion of culpability on the part of any person employed by or representing the Board in any capacity whatsoever.

Of the six recommendations of the committee, all of which were adopted by the Board, I quote the following two, showing the system now followed in (1) counter offers by the Board in preparing for acquirement of property, and (2) securing property either by direct purchase or under agreed verdicts in condemnation:

3. That the Board of Education adopt the following plan for the preliminary ascertainment of

the value and the making of offers for property it is seeking to acquire:

That said Board appoint a standing committee, to consist of its president, chairman of its committee on buildings and grounds, and its secretary, whose duties shall be to decide upon the amount of and to actually make the offers of the Board to the respective owners of the properties to be acquired, said decision to be based upon,

(a) The written opinion of a well qualified real estate expert of general experience in valuing both vacant and improved property.

(b) The last ascertainable full assessed value for tax purposes of both lands and buildings.

4. That the Board of Education adopt the following plan for deciding:

(a) At what prices property shall be ordered acquired by direct purchase.

(b) At what prices agreed verdicts be recommended in the respective condemnation proceedings instituted by it after its order to acquire property under the Eminent Domain Act has been concurred in by the City Council.

That said Board appoint a standing committee, to consist of its president, chairman of its finance committee, chairman of its committee on buildings and grounds, its secretary and its attorney, whose duties it shall be to decide, by the consent of at least a majority of the entire committee, at what prices agreed verdicts in its respective condemnation proceedings shall be recommended to said Board (through its committee on buildings and grounds), and at what prices properties shall be recommended in like manner to be acquired by direct purchase, said decision to be based upon:

(a) Written opinions of value of the land by two well qualified real estate experts, accompanied



by a detailed list of the sales in the neighborhood of the property under consideration.

(b) A written detailed opinion of the value of the improvements, by one well qualified building expert, accompanied by plans of said improvements.

(c) Last ascertainable tax valuation.

SCHOOL GROUND BEAUTIFICATION.

This is a subject deserving of repetition, pending accomplishment.

Tendency towards beautification of school grounds has become a fixed policy of the Board of Education. The policy, however, has not become a plan. It is hoped that in the future the creation of each school building unit may include something worth while in nature culture.

Trees, vines and as much lawn and hardy shrubbery as physical conditions permit without encroachment on playground space—particularly trees, which require several years to attain permanency—should be parts of each original plan and proportionate provision should be made for them in original estimates and appropriations.

The garden and plant idea is worthy, but it should be subordinate to the trees, shrubbery and vines, which with proper care will outlive the building itself.

In my annual report for last year the yard beautification idea was commended and its full accomplishment urged. Approvals and recommendations favoring it have been given directly or indirectly through various boards of education and other channels for years. But if the tendency as to policy becomes a plan, a splendid step forward will be accomplished. The importance of the work would seem to demand specialization upon it in the proper bureau and under the direction of a division head technically trained in landscape gardening and of proved ability to direct successfully creative work of

this nature. Progress has been made under the recently established practice of including school ground improvements with the building contract, work on the grounds to begin after completion of the building.

NEW BUILDING POLICY.

Admittedly the number of seats in new school buildings each year does not keep pace with the normal increase in number of pupils. If the pupil capacity of new and additions to old buildings had fallen behind the normal attendance growth in only an occasional year, the situation would not be materially serious now; it could be overcome perhaps in the next year or two years. It is serious, however, in that new building operations have fallen behind pupil growth for a number of consecutive years. The ratio obviously becomes more widely separated with each succeeding year.

Chicago is housing its pupils; no child of legal school age is denied admission to its public schools. The use, however, of portable and rented buildings and the half-day session idea are unsatisfactory expedients. Manifestly no child should be obliged to acquire in the fractional part of a day that knowledge to which another child may devote a full day.

Always, until Chicago's open urban spots are habited, a modicum of portable or rented buildings will be necessary while the transitory population adjusts itself. Portable buildings, though, should be used by the Board of Education to provide temporarily for immediate necessities, and not as a permanent feature in school structures.

Larger building operations should be according to a well-defined mathematical plan; such plan should be based upon population growth in the past and with a specified number of years in the future as the time for bringing capacity up to requirements.

CONCLUSION.

It is a pleasure to report progress and advancement along all lines of the educational system. It has been the policy of the Board of Education to work out a well defined business plan for all of the departments of the system. While these plans are not yet perfected, sufficient advancement has been made to lay the foundations for a more unified and systematized plan of procedure in the transaction of business, and in the handling of funds of the Board.

For the courtesies extended to the presiding officer, and for the support and co-operation that is existent among the members of the Board, the presiding officer is most profoundly grateful.

Respectfully submitted,

PETER REINBERG,

President, Board of Education.

SECRETARY'S ANNUAL REPORT.

Mr. Peter Reinberg, President of the Board of Education of the City of Chicago:

DEAR SIR—My report for the Administration Department for the school year ended June 30, 1914, is presented herewith.

Following the practice of former years, the Board's business activities are shown under the various bureau and office headings and in tables of site matters, cost and other pupil statistics, annual report of the Committee on Finance, Bureau of Audit statement of expenditures by schools and other data useful in printed record form.

BUREAU OF ARCHITECTURE.

New Carter H. Harrison Technical High School:

Several facts mark the completion of the Carter H. Harrison Technical High School as the Board's most notable building achievement of the year. It is distinctive in economy of construction, beauty and adaptability.

The total construction cost was, approximately, \$800,000, or 15 cents per cubic foot, including heating, ventilating and plumbing work, but not including equipment, cases, lockers, nor yard improvements. It is of three stories, the main building covering a ground area of 300 by 340 feet, and the shop annex 70 by 270 feet, the total contents being 5,325,000 cubic feet. The annex is designed to contain equipment for teaching various trades and occupations.

Architecturally, as shown by photographs in this report, the structure offers a combined suggestion of dignity, substantiability and grace seldom found combined in modern

buildings dedicated to public service. It is situated within a right angle formed by two of Chicago's boulevards, thoroughfares from which heavy traffic is excluded and which are beautified with tree and shrubbery plantings and continuous wide stretches of lawn.

Hence the building and its surroundings together offer a conspicuous aesthetic contribution to Chicago's beauty spots.

It is the first building in Chicago designed as a technical school for girls as well as boys. One other school, the Lucy L. Flower, is used exclusively as a girls' technical high school. The latter structure, however, was originally a high school for boys and girls and for several years preceding its present function was leased at a profitable rate of rental to the Board.

Other Building Operations:

Capacity of the Chicago Normal College is materially increased by the addition of a new building.

It contains a large gymnasium, swimming pool, shops, designing rooms, household art rooms, studios, etc., all of which are designed to be used in connection with the other college buildings. Similar accommodations in the more modern school buildings such as assembly hall, gymnasium, manual training and household art rooms, etc., have brought urgent demand from many older schools for these features.

Particulars of building operations, including additions made to old buildings and buildings remodeled, are shown in statements tabulated as follows:

Table I. Buildings completed during the year ended June 30, 1914.

Table II. Buildings under construction June 30, 1914.

Table III. Buildings authorized and appropriations prior to June 30, 1914. Not under contract on that date.

TABLE I.

BUILDINGS COMPLETED DURING THE YEAR ENDED JUNE 30, 1914.

Note—"A. H." indicates Assembly Hall; "G" indicates Gymnasium.

Name and Location.	Number of Rooms Assembly Hall Gymnasium.			Number of Pupils.	Approximate Cost.
NEW BUILDINGS—					
Carter H. Harrison Technical High—24th and Marshall Bvds	96 rooms (including laboratories, shops, etc.), A. H. (seating capacity 2,000)			3,000	
	Building			\$	850,000.00
	Equipment				100,000.00
Normal—68th and Stewart Ave.....	Arts and Gymnasium building, 52 rooms			1,200	490,000.00
Park Manor—Rhodes Ave. and 71st St.....	24—	A. H. G.		1,200	175,000.00
Swift—Winthrop and Ardmore Aves.....	22—	A. H. G.		1,100	225,000.00
	194	3	5	6,500	\$1,840,000.00
ADDITIONS—					
Lloyd—49th and Dickens Aves.....	12—	.. .. G.		600	\$ 72,000.00
Burnside—91st Pl. and Langley Ave.....	12—	A. H. G.		600	145,000.00
Lowell—Hirsch St. and Spaulding Ave....	12—	A. H. G.		600	125,000.00
Oglesby—Green and 77th Sts.....	12—	.. .. G.		600	78,000.00
Bryn Mawr—74th St. and Jeffery Ave....	6—	A. H. G.		300	100,000.00
Jungman—Nutt and 18th Sts.....		A. H. G.		...	58,000.00
	54	4	6	2,700	\$ 573,000.00
ALTERATIONS—					
Ray—Kimbark Ave. and 57th St.....	Remodel Old Hyde Park High School for elementary school.			\$	45,000.00
Manierre—Hudson Ave. and Blackhawk St..	Remodeling of heating, ventilating and plumbing systems....				37,000.00
Burroughs—35th Pl. and Washtenaw Ave..	Remodeling of heating, ventilating and plumbing systems....				32,000.00
Brainard—Washburne and Hoyne Aves....	Remodeling of heating, ventilating and plumbing systems....				32,000.00
King—Harrison St. and Western Ave.....	Remodeling of heating, ventilating and plumbing systems....				28,000.00
Earle—61st St. and Hermitage Ave.....	Boiler room alterations.....				10,000.00
					\$184,000.00
	Rooms	A. H. G.	Pupils.	Approximate Cost.	
Total buildings completed during the year ended June 30, 1914.....	248	7	11	9,200	\$2,597,000.00

TABLE II.

BUILDINGS UNDER CONSTRUCTION JUNE 30, 1914.

Name and Location.	Number of Rooms			Number of Pupils	Approximate Cost
	Assembly Hall	Gymnasium			
NEW BUILDINGS—					
Shepard, Henry O.—Fillmore and Mozart Sts.	23	A. H. G.		1,150	\$ 225,000.00
Juvenile Detention—Forquer St., east of Halsted St.....	6	G.		150	75,000.00
Reilly, Frank W.—Monticello Ave. and School St.....	23	A. H. G.		1,150	220,000.00
Creiger, DeWitt C.—Selden, Wood and Yeaton Sts.....	32	A. H. G.		1,600	265,000.00
Sabin, Albert R.—Hirsch and Leavitt Sts..	32	A. H. G.		1,600	265,000.00
Pelrce, Helen C.—Bryn Mawr and Glenwood Aves.	24	A. H. G.		1,200	175,000.00
	140	5	6	6,850	\$1,225,000.00
ADDITIONS—					
Scanlan—Perry Ave. and 117th St.....	16	A. H. G.		800	\$ 210,000.00
Lawson—12th Pl. and Homan Ave.....	12	A. H. G.		600	200,000.00
Forestville, St. Lawrence Ave and 45th St..	5	A. H. G.		250	90,000.00
	33	3	3	1,650	\$ 500,000.00
Total buildings under construction June 30, 1914					
	173	8	9	8,500	\$1,725,000.00

TABLE III.

**BUILDINGS AUTHORIZED AND APPROPRIATIONS PRIOR TO JUNE 30, 1914, NOT
UNDER CONTRACT ON THAT DATE.**

Name and Location.	Number of Rooms Assembly Hall Gymnasium	Number of Pupils	Appro- priation
NEW BUILDINGS—			
Sexton, Austin O.—60th St. and Langley Ave.	23—A. H. G.	1,150	\$ 215,000.00
Henzl, Theodore—Douglas Blvd. and Lawndale Ave.	32—A. H. G.	1,600	285,000.00
Rila, Jacob A.—Throop, Taylor and Lytle Sts.	23—A. H. G.	1,150	215,000.00
Norwood Park—Nickerson and Nina Aves..	16—A. H. G.	800	140,000.00
Lindblom, Robert, High— 61st, 62nd and Lincoln Sts.....	Modern High School —A. H. G.	2,500	900,000.00
Normal High—68th St. and Stewart Ave...	Modern High School —A. H. G. (Available, \$10,000.)	1,500	750,000.00
John Worthy—Gage Farm	Erect a school building on Gage Farm to replace present John Worthy School (Available, \$25,000.)		75,000.00
	94 6 6	8,700	\$2,580,000.00
ADDITIONS—			
Austin High—Fulton and Lotus Aves.....	Class Rooms, A. H. G. Laboratories, shops, etc.	1,000	\$ 350,000.00
Beldler—Walnut St. and Kedzie Ave.....	6—A. H. G.	300	125,000.00
Chicago Lawn—65th St. and Homan Ave..	12—G.	600	120,000.00
Ryerson—Lawndale Ave. and Huron St....	12—A. H. G.	600	150,000.00
Healy—Wallace and 30th Sts.....	A. H. G.	...	50,000.00
Lake View High—Ashland Ave. and Irving Park Blvd.	A. H. and tear down old part of present building and replace with new addition	1,400	500,000.00
Schurz High—Milwaukee Ave. and Addison St.	Class rooms, G. Woodworking shops, Electricity shop, Dining room, Swimming pool, etc.	1,200	250,000.00
Field—Ashland Blvd. and Greenleaf Ave..	12—A. H. G.	600	165,000.00
Franklin—Goethe and Wells Sts.....	A. H. G. and swimming pool	...	100,000.00

Lewis-Champlin, Stewart Ave. and 62nd					
St. ....j.....	Convert Englewood High School into an elementary school for the Lewis Champlin School when new Normal High School is completed.				
	(Available, \$5,000.)				
	42	7	9	5,700	\$1,960,000.00
	Rooms.	A.	H.	G.	Pupils.
					Appropriation.
Total buildings ordered but contracts not					
let	136	13	15	14,400	\$4,540,000.00

NOTE—Seating capacity of all class rooms is computed at 50 per room, as in reports of previous years.

RECAPITULATION.

	Rooms	A. H.	G.	Pupils	Approximate Cost
Table 1: Buildings completed during the year ended June 30, 1914.....	248	7	11	9200	\$2,597,000.00
Table 2: Buildings under construction June 30, 1914.....	173	8	9	8500	1,725,000.00
Table 3: Buildings ordered but contracts not let	136	13	15	14400	4,540,000.00

BUREAU OF AUDIT.**Itemized Budget Making:**

A long step in advance was taken early this year when the Board of Education undertook to bring its budgetary and accounting procedure up to the standard adopted and followed by many municipalities and by larger private institutions. Tremendous growth of educational activities indicated the inadequacy of existing systems and necessity for scientific budget-making and definite accounting control of expenditures. Expenditures increased from \$9,000,000 in 1902 to \$15,000,000 in 1913, and activities became so extensive that the need of setting up a definite annual program of contemplated work, in the form of a segregated definite budget, became urgent as well as apparent.

On February 27, 1914, the Committee on Finance directed the president and secretary to request the efficiency division of the city Civil Service Commission to prepare an itemized budget of educational expenditures for 1914, based upon estimates which had been received by the committee from the superintendent of schools and the secretary.

A definite detailed budget of estimated revenues and appropriations, based upon expenditures for the calendar year 1913, was presented. It included rules governing advancement of salaries for positions under civil service. A plan for future preparation of the annual budget, both for educational and building purposes, and a general scheme for accounting control of all expenditures also were included. These reports and the 1914 budget have been adopted and are being adhered to by the administrative offices and the Board.

The itemized budget places before the Board and the citizen body a fixed annual program of activities. It is thus in the nature of a prospectus, both of revenues and contemplated expenditures, and presents in summary form all nec-

CARTER H. HARRISON TECHNICAL HIGH SCHOOL,
Marshall and W Twenty-fourth Boulevards, Chicago.

essary facts. Advantages of a definite budget are that clear and comprehensive statements are obtained of the various functions and activities and a basis made for judging understandingly the adequacy or inadequacy of appropriations. Each of the objects of expenditure has been standardized and clearly defined in the schedule of accounts so that there need be no misunderstanding as to the meaning of terms by those in charge of the preparation of estimates, by board members, by administrative officers or by accounting and auditing officers and employes.

In Full Operation for 1915:

As the Board's fiscal year corresponds with the calendar year, it manifestly will be impossible to put the new budget into immediate effect in all of its provisions. This much will be definitely accomplished: Records establishing control over the distribution of supplies will have been finished when the schools open on September 1.

It has been decided to maintain the old system of accounts until the end of the current fiscal year, and at the same time to write up a complete set of books under the new standard accounts. By this method figures will be available (for at least six months under the new classification) for purposes of comparison in compiling the 1915 budget. Some idea of the magnitude of the task set for the Bureau of Audit may be obtained when it is stated that there are about three hundred and sixty school and other budget units and from ten to twelve accounts under each unit, and also that all payrolls are bi-monthly. The work will be considerably facilitated, however, by an equipment of punching, distributing and tabulating machines, similar in design and purpose to those used by the United States Census Bureau and offices of the larger municipal and private corporations.

The principal benefit to be derived from this new system of standard accounting, aside from accurate detailed infor-

mation, will be accounting control over commodities of the Division of Supplies warehouse and materials at the Bureau of Repairs workshop; in the purchase and distribution of all supplies and materials, and a similar control over all salary payments.

Future Budgets:

Any year's budget should be so automatic in its control of expenditures that, once adopted, officers and members will be relieved of the many time-consuming annoyances of the past and heads of departments able to devote time to executive supervision and more exact and painstaking attention to estimates for the ensuing year.

It is important that the budget should be passed before the year's close or promptly thereafter so that department heads may have reasonable time to complete expenditure plans based on the budget estimates for which they are responsible. The present budget was not adopted until June 24, practically six months after expenditures began. Even as formerly passed, in February, only eight school months remained of the year. The City Council, after several years of effort and co-operation by the Mayor, Comptroller, department heads, the Council and its committee on finance, passed its appropriation bill early in January for the years 1911, 1912, 1913 and 1914. The city's experience from resultant safety and business facility, as testified by all officials and employes concerned, removes any possibility of returning to the old practice of delay.

It is with extreme personal sadness—which I know reflects the feeling of all members of the Board and employes who knew him during his many years of faithful service—that I mention Fred Vogt, auditor at the time of his death, February 17. All would have wanted him to participate in the present constructive work, so vitally affecting Board finances through the bureau of which he was the devoted head. Mr.

Vogt's service with the Board began as a messenger May 13, 1884. By deserved promotion he advanced through several positions of responsibility and trust in the Bureau of Audit to assistant auditor on June 24, 1891, and auditor January 25, 1911. He has been succeeded temporarily by Harry H. Brackett, head clerk in the bureau, as acting auditor. The position will be filled permanently by a Civil Service examination, now pending.

BUREAU OF SCHOOL ENGINEERING.

Standardization, Repairs and Renewals:

Need for standardizing mechanical and electrical equipment of new buildings has received particular attention during the incumbency of the present bureau head. In designing plans for new buildings a considerable saving in operating cost and more ease and economy of operation is promised under this standardization.

The appropriation for repairs and improvements was less than for former years. It was found impossible to make many needed changes, but much will be accomplished during the summer months, the only season when overhauling work can be done. Consideration is being given constantly to more modern ventilating systems and toilet room equipments. The idea is being applied in remodeling some of the older buildings. Heating and ventilating plants of the Everett, Yale and Flower buildings have been replaced with new equipment. The ultimate cost of completely overhauling the one hundred buildings equipped with basement toilet rooms and range closets would be approximately \$2,000,000. Of course, this would be impossible of accomplishment, but it would be well for the Board to maintain its policy of changing as many as possible each year.

PENDING CASES—NOT CONDEMNATION.

SUPERIOR COURT.

79,971	City of Chicago, use, v. South Park Commissioners.
56,697	Bush v. Hitt et al.
69,483	Wilson v. Hitt et al.
172,288	City v. Board of Education et al.
245,807	Stumer v. Board of Education.
248,562	MacVeigh v. Board of Education.
250,303	Carrier v. Board of Education.
282,871	Heild, Trustee, v. Marcinkowski et al.
290,234	Logg v. Watson.
294,635	Board of Administration v. Stead et al.
305,368	Atlas Construction Co. v. Tobin.
303,227	People ex rel. v. Metz et al.
301,362	Mitchell v. Mitchell.

CIRCUIT COURT.

B.R. 564	City v. Hitt.
B.R. 1128	Ayres, Receiver, v. Board of Education et al.
212,348	City, in trust, v. Met. W. S. E. R. R.
228,095	Tracy et al. v. Board of Education.
250,091	Schneider v. Plant.
257,812	Alling v. Richardson et al.
262,630	Board of Education v. Woods.
322,254	Schneider v. Cooley et al.
264,119	Rosenthal et al. v. Board of Education.
268,832	Lydiard v. Board of Education.
277,112	U. S. Coal Co. v. Board of Education.
275,223	City of Chicago v. Board of Education.
279,712	Lewis v. Edgar et al.
291,753	Provident L. & T. Co. v. Miln et al.
296,111	Drackett v. City of Chicago et al.
296,218	Varnum v. Shoop et al.
303,179	People ex rel. Columbus v. City of Chicago et al.
287,891	Smith et al. v. Miln et al.
321,751	Errant v. Board of Education et al.
B 3,560	Lane v. Board of Education et al.
—	Rogers v. Board of Education.

UNITED STATES CIRCUIT COURT.

Paul Steam System Co. v. Board of Education et al.

ILLINOIS SUPREME COURT.

Rosenthal v. Board of Education.
 People ex rel. Cameron v. Flynn.
 Harding v. Reinberg.

COUNTY COURT.

Board of Education v. George Klehm.

MUNICIPAL COURT.

City of Chicago v. Board of Education.

DISPOSED OF CASES.

CONDEMNATION.

No.	City, in Trust, V.	Site.	Value of Prop- erty as Fixed by verdicts.
297,563	Johnson	Yates	\$ 2,300.00
300,789	Bickerdike	Grace, Central and Drake.....	9,500.00
319,632	Keller	Bryn Mawr, Southport and Clark	65,250.00
319,030	Lilley	Emmet	13,150.00
319,834	Noyes	Seldon, Wood and Yeaton.....	125,875.00
319,635	Maskow	Hirsch, Irvingg and Leavitt.....	105,225
320,240	Sullivan	S. 42d and W. 18th street.....	Rescinded
321,026	Kaszab	Waveland, Grace and Oakley....	42,850.00
321,028	Stein	Throop and Lytle	113,255.00
321,674	Kittoe	65th, Richmond and Sacramento	15,500.00
321,624	Bingham	Paxton and 70th	Rescinded
321,626	Vomacka	Cornell	19,850.00
321,627	Garrett	Schubert and Kimball	Rescinded
321,795	Sullivan	Jenner	58,200.00
322(163	Van Herik	Emerson	6,800.00
322,408	Madigan	Key	18,250.00
322,469	Counselman	Bryant	1,950.00
322,602	Rann	Lincoln	37,950.00
322,817	Crafts	Emmet	5,000.00
322,818	Armour	Jackson Park and 84th.....	Rescinded
323,212	Lamm	Ryerson	15,350.00
323,290	Meisels	Tuley High	28,400.00
323,457	Brown	Hoyne, Leavitt and 101st	10,000.00
323,935	Jones	Rockwell and 52d	13,000.00
323,936	Le Moyne	Waveland, Rokeby and Reta....	.....
323,937	Hrabak	Bass	750.00
324,380	Smyth	Park Manor	21,050.00
324,669	Lear	Copernicus	29,484.00
324,775	Cooney	Throop and Raylor.....	9,500.00
324,885	Miles	Douglas	10,100
326,027	Williams	Dewey	9,500.00
326,145	Chicago Railways Co.....	La Salle	Rescinded

OTHER THAN CONDEMNATION PROCEEDINGS.

289,821	Superior Court, Ranallo v. Magrady.
281,223	Superior Court, Atlas, for use, v. Board of Education.
283,441	Superior Court, McCall v. Board of Education.
35,013	County Court, Objection to Special Assessment.
37,623	County Court, Objection to Special Assessment.

The following are the sites in which condemnation proceedings now are being prepared and are in the various stages of advancement, petitions for the same to be filed in court as soon as the preliminary title adjustments are made:

Adams, 37th and Leavitt streets.
Hayt, 61st and Lincoln streets.
Lake View High, Paulina, Bryan and Chase avenues.
Nettelhorst—
Wells, Maud avenue and Poe street.
Parental, Wellington and 79th avenues.
Ole A. Thorp, Wellington and 49th avenues.

BUREAU OF PURCHASES.

School, School Plant and Fuel Supply:

This bureau has purchased during the past school year school and school plant supplies of value, in round numbers, of \$500,000, of which those of a value of \$276,000 were handled through the Division of Supplies warehouse. Fuel purchased through the bureau was of a value of approximately \$325,000. Routine of purchasing school and school plant supplies was largely simplified by the standardization of stock lists referred to in former annual reports. It is intended further to group all supplies in the many educational and administrative divisions.

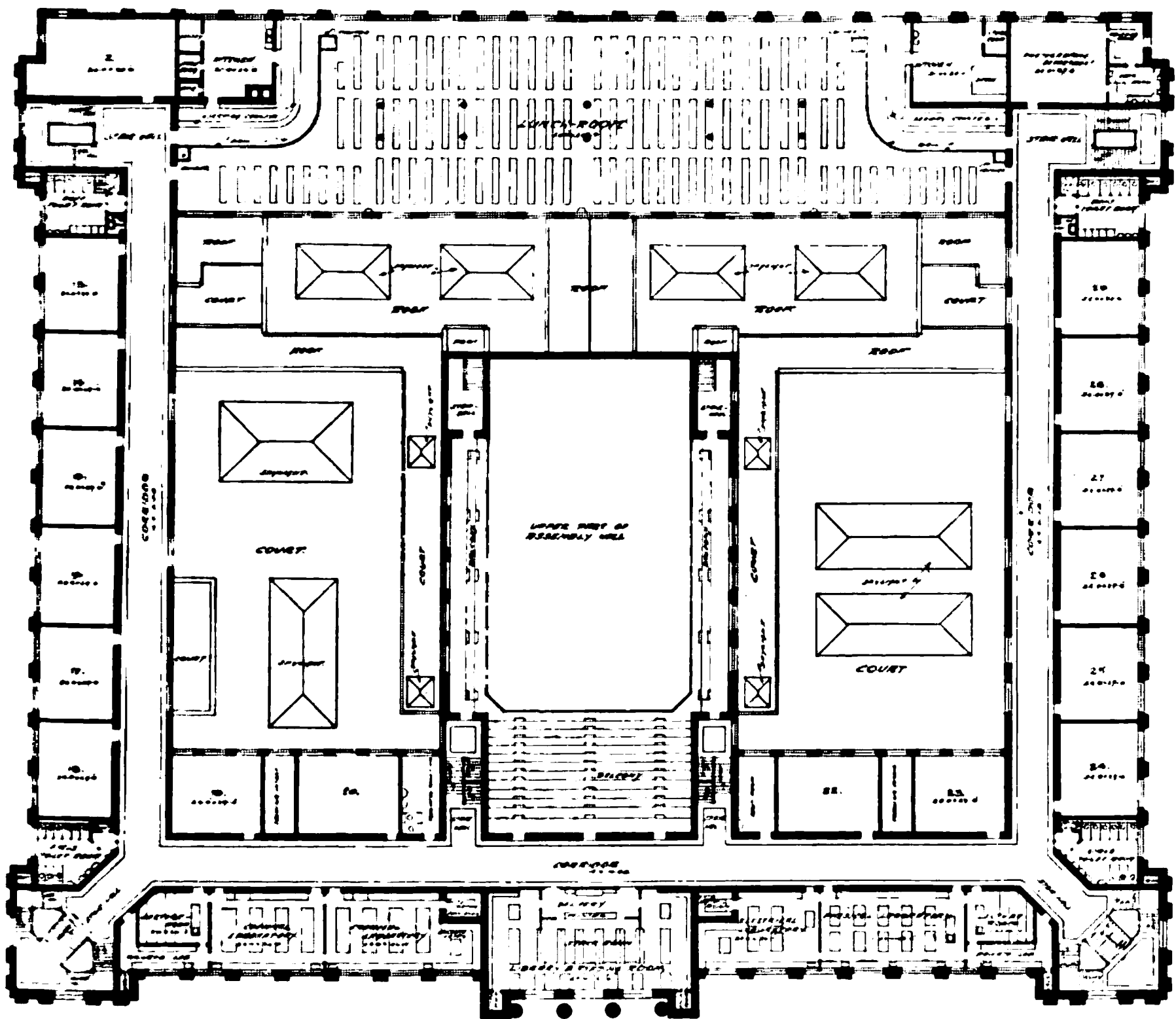
Immediately following the secretary's report appear tabulated statements for the Bureau of Purchases showing:

Table I. \$982,620.80 paid for or applying on sites and additions to sites during the year ended June 30, 1914.

Table II. New sites and additions to old sites which were ordered during the year ended June 30, 1912, to be acquired under the Eminent Domain Law or by direct purchase—condemnation proceedings pending.

FIRST FLOOR PLAN.

CARTER H. HARRISON TECHNICAL HIGH SCHOOL.
Marshall and W. Twenty-fourth Boulevards, Chicago.



SECOND FLOOR PLAN.

CARTER H. HARRISON TECHNICAL HIGH SCHOOL.
Marshall and W. Twenty-fourth Boulevards, Chicago.

Table III. New sites and additions to old sites which were ordered during the year ended June 30, 1913, to be acquired under the Eminent Domain Law or by direct purchase—condemnation proceedings pending.

Table IV. New sites and additions to old sites which were ordered during the year ended June 30, 1914, to be acquired under the Eminent Domain Law or by direct purchase—condemnation proceedings pending.

Also comparative statement of coal delivered for the school years 1912-1913 and 1913-1914 and the deductions made from contractors' bills under the British thermal unit system.

An estimated valuation of \$1,156,950 is made for new sites and additions to old sites now pending acquisition under the Eminent Domain Law. As in previous years the business manager visited each site and noted the description of all improvements thereon and in the neighborhood.

From the sale of old buildings on acquired sites \$49,855.60 was obtained. During the year the Board developed a policy of selling for removal from acquired sites only such buildings as would not depreciate values in the neighborhood to which such buildings were to be removed. Inferior buildings were sold conditional that they be razed on the premises. The Board's policy also has grown into wider co-operation with the city's building department, to the end that purchasers must agree to remodel them in accordance with the building code before permits for removal are approved and deposits released.

Non-School Use of Buildings:

As against \$6,465 obtained in 1912-13 for the use of school halls and rooms for other than school purposes, \$12,281.00 was received in 1913-14. Notwithstanding the wide and various uses of the buildings there were only two trivial instances in which applicants were admonished against violation of Board

rules. Subsequently the two applicants were granted permits to use other halls and the rules were not violated.

Deposits amounting to \$573,708.18 accompanying proposals were received during the year.

There has been an ever-increasing demand for school and school plant supplies and for expeditious service in the execution of requisitions.

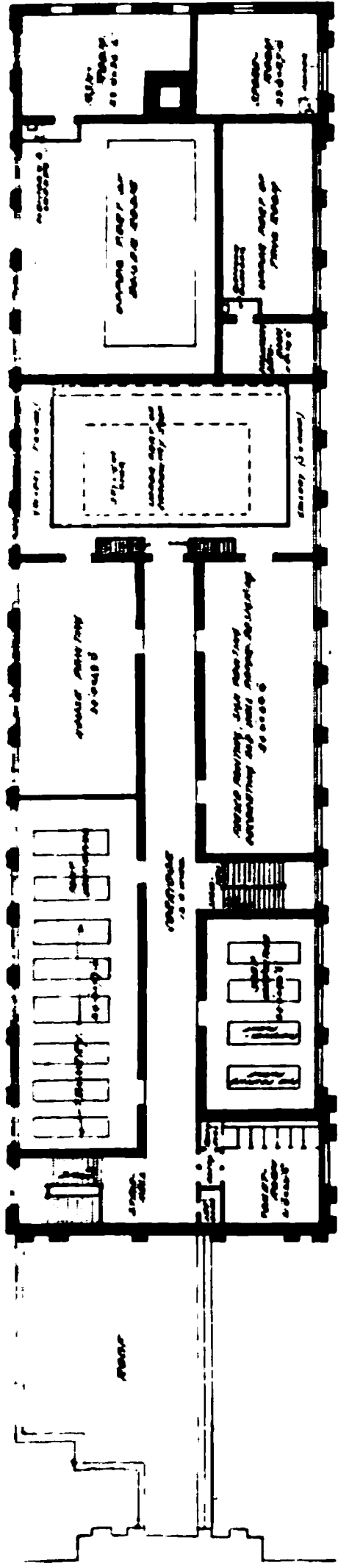
Method and form for making requisitions are intimately co-related to the new system of accounting control, the budget and routine in the Bureau of Purchases. It would be relatively unimportant in connection with small volume of business, but in the quantity, variety and intricacies of the Board's routine of appropriation, requisition, purchase, custody, delivery and bookkeeping, requisition method becomes highly important. It is planned to give a stock and accounting number to each commodity standardized and to devise a requisition form showing such number and the quantity required, on hand and last received. The change, it is believed, will minimize delay and facilitate conformity to budget provisions.

BUREAU OF REPAIRS.

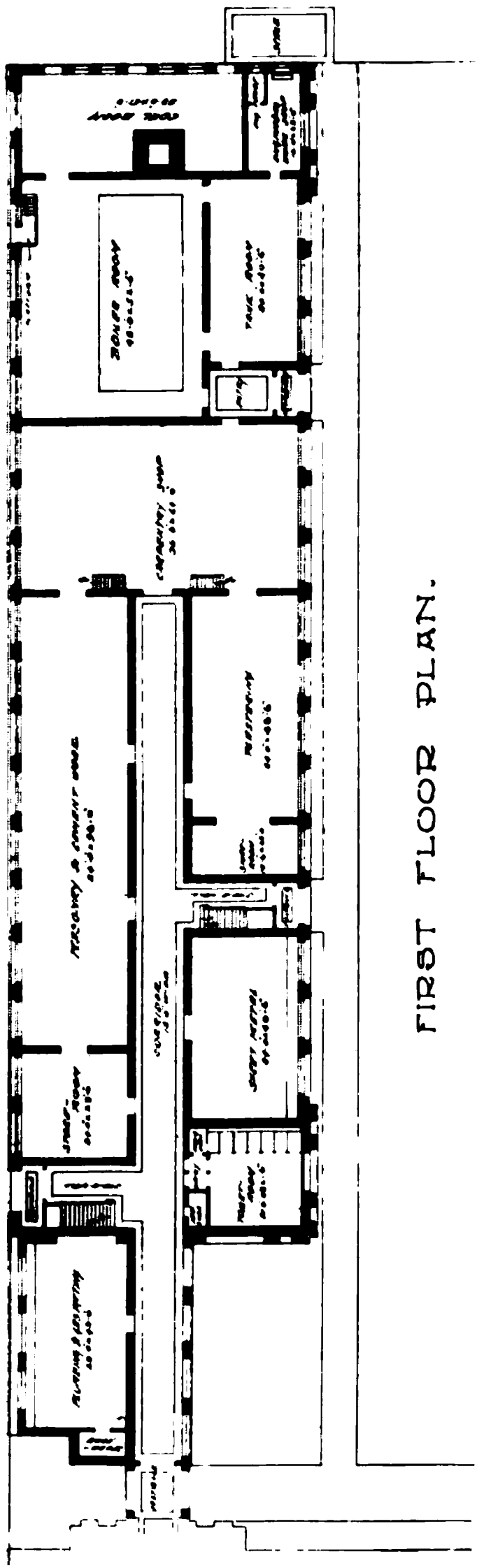
Workshop Recommendation Renewed:

The preceding annual report of the secretary contained the following:

Lack of proper workshop and factory facilities is a serious obstacle to continued efficiency in the Bureau of Repairs. Under troublesome inconveniences and unfavorable physical conditions, growing demands upon the bureau have been met only through the resourcefulness and good service of all the employes therein and by taxing to the limit the faulty physical equipment * * * *



SECOND FLOOR PLAN.



FIRST FLOOR PLAN.

SHOP ANNEX.

CARTER H. HARRISON TECHNICAL HIGH SCHOOL.

Marshall and W. Twenty-fourth Boulevards, Chicago.

The foregoing (bureau) functions apply to more than four hundred main, branch and portable buildings. The number is increasing rapidly. The bureau must have at once proper facilities for storage room, yard space, light, machinery operation and railroad trackage. None is possible in the present antiquated shop. The Austin School Fund property offers every advantage required. Abandonment of the present site, in addition to promoting Bureau of Repairs efficiency, would bring substantial financial profit.

Urgent need for a new shop and other repair facilities was presented also in the secretary's annual report for 1911-1912. The situation is becoming more critical year by year and will have to be met if the Bureau of Repairs is to be maintained in a manner to meet properly its present functions alone; future growth is impossible under present conditions.

The question has been raised as to whether more of the regular activities of the bureau might not be performed at less cost under contract. Actual cost under the present routine can be accurately determined from the new budget system and its attendant accounting control.

Expenditures for Contract Work:

Expenditures by the bureau for contract work and for work done by the bureau are separated in the following statement of activities for the year:

PUBLIC SCHOOLS.

PERMANENT IMPROVEMENTS.

BY BUREAU OF REPAIRS.

Kind of Work.	Number of Schools.	Cost.	
New Buildings and Additional Class Rooms fitted up.	140	\$173,613.44	
Portable Buildings made and installed.....	132	114,911.81	.
Fittings for Manual Training and Domestic Science Rooms (made and installed).....	95	12,497.88	
Portable Buildings (moved).....	32	7,153.48	
Alterations and Improvements.....	104	12,224.81	
Wagon Scales (made and installed).....	23	5,656.86	
Shades (made and installed).....	24	5,308.49	
Furniture for Stereopticon apparatus.....	16	593.56	
			<u>\$331,969.83</u>

BY CONTRACT.

Yard Improvements	56	\$ 80,984.70	
Cork Carpet	33	10,217.92	
Blackboards installed by Bureau.....	18	5,259.62	
Cement Floors and Stairs.....	30	4,627.61	
Iron Flagpoles (partly installed by Bureau).....	70	4,070.00	
Electric Clocks, Bells and Telephones (bells and tele- phones partly installed by Bureau).....	32	4,021.15	
Fire Escapes	3	2,217.40	
Soapstone Table Tops.....	2	1,080.00	
Wire Guards	19	912.65	
Black Dirt	20	831.24	
Iron Handrails	6	210.45	
			<u>114,432.74</u>

BY BUREAU OF REPAIRS AND BY CONTRACT.

Gymnasiums fitted up.....	18	\$ 447.50	
			<u>447.50</u>
Total for Permanent Improvements.....			<u><u>\$446,840.07</u></u>

APPARATUS AND FURNITURE.

BY BUREAU OF REPAIRS.

Kind of Work.	Number of Schools.	Cost.	
Furniture manufactured or under construction.....	...	\$ 46,073.27	
Lockers and special furnitures installed.....	58	21,804.36	
			<u>\$ 67,877.63</u>

BY CONTRACT.

Opera and other chairs.....	34	\$ 22,610.74	
			<u>22,610.74</u>
Total for Apparatus and Furniture.....			<u><u>\$ 89,988.37</u></u>

GENERAL REPAIRS.

BY BUREAU OF REPAIRS.

Doors and Windows.....	278	\$ 33,007.50	
Seating changes	244	24,168.58	
Shades	237	17,411.74	
Sheet and Metal Work.....	240	15,718.86	
Locks, Springs and Door Checks.....	223	11,218.88	
Wagon Scales	206	9,649.87	
Furniture	151	8,421.95	
Floors	104	6,796.83	
Electric Bells and Telephones.....	181	2,866.61	
Saws filed (Manual Training).....	155	1,402.54	
Kindergarten Circles	171	1,153.02	
Disinfecting	117	829.22	
Miscellaneous Repairs	295	45,061.59	
			<u>\$177,707.19</u>

BY CONTRACT.

Mason Work and Plastering.....	71	\$ 10,666.55	
Gravel Roofs re-coated.....	4	1,037.00	
Flagpoles and replacing Ropes (Rope and Woodwork only by Bureau of Repairs).....	50	115.34	
			<u>11,818.89</u>

BY BUREAU OF REPAIRS AND BY CONTRACT.

Renovating, including painting, etc.....	132	\$ 75,120.12	
Fences and Walks (Woodwork only by Bureau).....	133	5,884.08	
Blackboards	102	4,432.69	
Gymnasium apparatus	6	323.50	
			<u>85,760.39</u>
Total for General Repairs.....			<u>\$275,286.47</u>
Grand Total			<u><u>\$812,114.91</u></u>

RECAPITULATION.

	By Bureau of Repairs.	By Contract.	By Bureau and by Contract.
Permanent Improvements	\$331,959.83	\$114,432.74	\$ 447.50
Apparatus and Furniture.....	67,877.63	22,610.74	.....
General Repairs	177,707.19	11,818.89	85,760.39
	<u>\$577,044.65</u>	<u>\$148,862.37</u>	<u>\$ 86,207.89</u>

SECRETARY'S OFFICE.

Teachers' Payroll System:

In August, 1913, was adopted the plan of paying the teaching force twice monthly. Although it doubled payroll work in the secretary's office, it has been necessary to add only one employe to the payroll force. The plan includes delivery of checks to the schools, thus avoiding loss of time to principals or teacher-messengers who formerly came to the Board offices for checks for their respective schools. Automobiles are used for delivery of the checks by seven clerks from the secretary's office in as many routed districts of about forty schools each. There is no confusion nor delay in this system, which is at less expense than for the high schools alone under former practice.

I believe the suggested new payroll accounting plan for the teaching force should be adopted. It proposes that payrolls be made in triplicate at each school. All data and information on which the confusing schedules of pay are based should appear thereon, one payroll sheet to be retained by the principal, another used as a basis for preparation of warrants in the secretary's office, and the third used for payroll checking in the Bureau of Audit. The payroll form should show for the regular teaching force the number of days actually employed and absence and cause therefor, with proper notations for deductions, also proper columns for warrant numbers, pension data, etc., entries to be made in the secretary's office. The names and other data for regular and substitute teachers should be separated on one payroll sheet, thus offering opportunity for immediate checking of errors.

It probably will be found possible to do most of the payroll work by accounting machines much more expeditiously, with less liability for error and at less cost than under the present system. These machines could be used in connection

with the kind recommended for the Bureau of Audit and would bring at least this part of the administrative department's routine up to the standard set by the larger private and public corporations in their employment departments.

Year's Routine Summary:

Following is a summary of the routine work performed in the secretary's office:

Teachers' payrolls, semi-monthly.....	293
Teachers' warrants, monthly	15,651
Rent collections	\$654,773.43
Interest collections on investments.....	\$57,307.67
Interest on bank deposits.....	\$14,535.25
Tuition collections	\$4,499.54
Original board reports prepared.....	3,580
Regular and special board meetings reported and printers' copy prepared	38

Public School Teachers' Pension and Retirement Fund.

Pensioners, September, 1913	436
Pensioners added, 1913-14	40
Pensioners, September, 1914	476
Paid to Pensioners, 1913-14.....	\$170,893.92
Warrants issued, 1913-14	4,840

Public School Employes' Pension Fund.

Pensioners, September, 1913.....	40
Pensioners added, 1913-14.....	4
Died or returned to service	9
Pensioners, September, 1914	35
Paid to Pensioners, 1913-14.....	\$ 12,167.93
Warrants issued, 1913-14	428

Diplomas Issued.

Elementary	16,607
Four-year High	2,383
Junior College	18
Two-year Vocational	856
Pre-Vocational	212
Normal	221
Evening	690
Total	<u>20,987</u>

PORTABLE AND RENTED BUILDINGS.

Use of portable and rented buildings is discussed in the president's annual report. Details of the number of such buildings, seat capacity and number of pupils for the years 1904 to 1914, inclusive, are shown in tabulated form elsewhere in this report.

EMPLOYMENT CONDITIONS.

Reference has been made in former annual reports to possible needed adjustment of bureau functions and of conditions of employment in the Administration Department. Most if not all of these matters will be commented upon, it is believed, in the report by the Civil Service Commission on its survey of such functions and conditions, the survey having been performed at the Board's request.

A PERSONAL WORD.

A final personal word in a report of this kind usually is accepted as customary formality. Such word does not always

ENTRANCE LOBBY—CARTER H. HARRISON TECHNICAL HIGH SCHOOL.
Marshall and W. Twenty-fourth Boulevards, Chicago.

carry home its sincere inception and fully intended meaning. I trust an exception may be made of my wish to pay tribute to the several sources of personal help to me throughout an unusually busy and progressive year. I refer to the present and retired members of the Board, bureau heads and employes. I want to testify frankly that such a good school year has been made possible only through their uniformly voluntary and helpful co-operation.

Respectfully submitted,

LEWIS E. LARSON,

Secretary.

RENTED BUILDINGS AND PORTABLE BUILDINGS IN USE ON
JUNE 30 OF EACH YEAR 1904 TO 1914, INCLUSIVE.

RENTED BUILDINGS					PORTABLE BUILDINGS (Note—Each has 1 room and 48 seats.)	
Year	Buildings	Rooms	Seats	Pupils	Buildings	Seats
1904.....	40	153	6968	5688	.....	.....
1905.....	35	138	6525	5786	14	672
1906.....	31	89	4382	3589	45	2160
1907.....	24	76	4793	3080	52	2496
1908.....	16	44	3396	1854	53	2544
1909.....	25	49	2306	2142	55	2640
1910.....	25	59	2787	2623	52	2496
1911.....	21	35	1651	1328	58	2784
1912.....	18	31	1403	1117	56	2688
1913.....	21	42	1941	1630	59	2832
1914.....	16	45	2078	1786	195*	9360

* Eight other portable buildings ordered to be erected.

COAL PURCHASED DURING SCHOOL YEARS 1912-13 AND 1913-14.
COMPARATIVE STATEMENT OF DEDUCTIONS UNDER
B. T. U. SYSTEM AND OF NET COST.

		Bituminous	Anthracite
Tons Delivered—			
1912-13		119,069	2,768
1913-14		120,086	3,194
Deductions—			
1912-13	\$	7,459.17	.....
1913-14		12,959.62	.....
Net Cost—			
1912-13		341,784.06	\$21,166.95
1913-14		337,013.68	25,393.08

SITES. TABLE I.

PAYMENTS FOR OR APPLYING ON SITES AND ADDITIONS TO
SITES DURING YEAR ENDED JUNE 30, 1914.

Additions to Sites—	School	Payment for	
		Full Payment	Part of Site
Andersen			\$ 6,859.00
Arnold		\$ 17,968.00	
Bancroft		7,963.00	
Bass		753.00	
Brainard		7,756.00	
Bryant		1,953.00	
Clay			2,203.00
Copernicus		29,532.00	
Cornell		20,594.00	
Cregler		30,023.00	
Dewey		9,507.00	
Doolittle		19,530.00	
Douglas		10,108.00	
Emerson		10,665.00	
Emmet		18,160.00	
Gage Park (New)		13,003.00	
Gresham Branch		2,703.00	
Hammond		11,910.00	
Healy		2,754.00	
Hersl			63,435.00
Howland		45,585.00	
Hyde Park High (Old)			32,509.00
Jenner		58,224.00	
Key		18,259.00	
Komensky		13,669.00	
La Fayette		2,754.00	
Lincoln		37,970.00	
Longfellow		4,254.00	
Madison		4,183.00	
Manierre		15,218.00	
Marshall High		15,003.00	
McLaren		24,503.00	
Otis		26,922.00	
Park Manor		21,073.00	
Parkside		17,315.00	
Pelrce		19,256.00	
Rlis			122,841.00
Ryerson		5,359.00	
Sabin		3,504.00	
Scott			25,167.00
Sexton, Austin O.			71,883.00
Shepard		5,000.00	
Tuley High		28,421.00	
Wadsworth			24,755.00
Wentworth		22,006.00	
Yale		4,503.00	
New Sites—			
N. Kostner and Wrightwood avenues.		1,437.80	
Grace street and Oakley avenue.		9,353.00	
81st street and Jeffrey avenue.			4,312.00
101st and Leavitt streets.		10,003.00	
Totals.		\$628,656.80	\$353,964.00
Grand Total.			\$982,620.80

SITES. TABLE II

NEW SITES AND ADDITIONS TO OLD SITES WHICH WERE ORDERED DURING THE YEAR ENDED JUNE 30, 1912, TO BE ACQUIRED UNDER THE EMINENT DOMAIN LAW OR BY DIRECT PURCHASE—CONDEMNATION PROCEEDINGS PENDING.

Name of School or Site.	Location.	Order for Condemnation or Direct Purchase.	Frontage.
Arnold	Center and Burling sts.....	6/12/12—No. 18235..	22 feet on Orchard st.
Columbus .....	.....Augusta	17287..	72 feet on Augusta st.
Hammond .....	.....W. 21st	18139..	50 feet on W. 21st pl.
Manierre .....	.....Hudson ave. and Blackhawk st.....	18140..	50 feet on Hudson ave.
Ryan .....	.....Lawndale ave. and Huron st.....	6/12/12—No. 18239..	50 feet on N. Lawndale ave.
Site	80th and 81st sts., Jeffrey and Central ave. 6/26/12—No. 18852..		{ 148.25 feet on Jeffrey ave. 248.22 feet on Chappel ave.

SITES. TABLE III.

NEW SITES AND ADDITIONS TO OLD SITES WHICH WERE ORDERED DURING THE YEAR ENDED
JUNE 30, 1913, TO BE ACQUIRED UNDER THE EMINENT DOMAIN LAW OR BY DIRECT
PURCHASE—CONDEMNATION PROCEEDINGS PENDING.

Andersen	W. Division and Lincoln sts.	12/11/12—No.	19460..	154 feet on Newton st.
Bancroft	Maplewood and North ayes.	5/ 2/13—No.	20495..	73 feet on Maplewood ave.
Bradwell	Burnham ave. and E. 77th st.	2/24/13—No.	19935..	{ 200 feet on Marquette ave.
Brainard	Washburne ave. and Leavitt st.	11/27/12—No.	19346..	{ 200 feet on Burnham ave.
Bryn Mawr	E. 74th st. and Jeffrey ave.	7/10/12—No.	18456..	{ 25 feet on Washburne ave.
Clay	Burley ave. and E. 133rd st.	2/24/13—No.	19936..	{ 25 feet on E. 74th st.
Cooper	W. 19th st. and Ashland ave.	10/30/12—No.	19133..	{ 298 feet on Central ave.
Harvard	Harvard ave. and W. 76th st.	12/11/12—No.	19401..	{ 189 feet on Burley ave.
Healy	Wallace and W. 30th sts.	5/ 2/13—No.	20496..	{ 414 feet on Buffalo ave.
Hyde Park High	Kimberly ave. and 57th st.	10/ 2/12—No.	18920..	{ 75 feet on
Howland	Sunshine ave. and W. 16th st.	10/30/12—No.	19134..	{ 75.3 feet on
Madison .....	.....	.....	19551..	{ 85 feet on
McLaren .....	.....	.....	19464..	{ 25 feet on
Newberry .....	.....	.....	19552..	{ 25 feet on
Norwood Park Br. No. 1 .....	.....	.....	19348..	{ 178.25 feet
Otis .....	.....	.....	19467..	{ 82 feet on
Raymond .....	.....	.....	20497..	{ 75 feet on
Sawyer Avenue .....	.....	.....	19463..	{ 100 feet on S. Washburne ave.
Trumbull .....	.....	.....	19462..	{ 200 feet on S. Sawyer ave.
Scott .....	.....	.....	19646..	{ 30 feet on Foster ave.
Waller High .....	.....	.....	20311..	{ 26.5 feet on
Yates .....	.....	.....	19554..	{ 157.27 feet
Site	Ridgeway ave. and 16th st.	.....	20144..	{ 250 feet on
Site	123rd st., State st. and La Fayette ave.	6/14/13—No.	20610..	{ 803 feet on
Site	Grace st. and N. Maynard ave.	2/24/13—No.	19933..	{ 594 feet on
Site	Eberly ave., bet. Wilson and Leland ayes.	12/11/12—No.	19458..	{ 262.62 feet on W. 123rd st.
Site	Addison ave., Rokeby and Reta sts.	12/11/12—No.	19459..	{ 262.62 feet on W. 124th st.
				{ 660 feet on W. Grace st.
				{ 5 acres.
				{ 321.25 feet on Rokeby st.
				{ 321.25 feet on Reta st.

SITES. TABLE IV.

NEW SITES AND ADDITIONS TO OLD SITES WHICH WERE ORDERED DURING THE YEAR ENDED
JUNE 30, 1914, TO BE ACQUIRED UNDER THE EMINENT DOMAIN LAW OR BY DIRECT

Adams	Townsend and Locust sts.	9/17/13—No.	21380..	400 feet on W. 62nd pl.
Chicago Lawn Br. No. 1.	62nd st., 62nd, pl., S. Hamlin and Spring- field aves.	9/17/13—No.	21500..	803.5 feet on W. 62nd st.
Hamilton	Cornelia and N. Marshallfield aves.	9/17/13—No.	21498..	50 feet on N. Marshallfield ave. 60 feet on N. Paulina st. 126 feet on S. California ave. 150 feet on W. 24th st. blvd.
Harrison Tech. High.	Marshall blvd. and W. 24th st.	9/17/13—No.	21495..	150 feet on Thome ave. 50 feet on N. Ashland ave. 75 feet on N. Lincoln st.
Hayt	Granville and Greenview aves.	9/17/13—No.	21499..	50 feet on Aldine ave. 75 feet on Nina ave. 75 feet on Grand ave.
Lake View High.	N. Ashland ave. and Irving Park blvd.	9/17/13—No.	21840..	40 acres.
McPherson	N. Lincoln st. and Leland ave.		24444..	120 feet on Foster ave.
Nettelhorst	Broadway and Aldine ave.		21494..	120 feet on Winona ave.
Norwood Park	Hurlbut st. and New Hampshire ave.		23888..	244.6 feet on N. Marshallfield ave. 601 feet on Wellington ave.
Otis	Armour st. and Grand ave.		24446..	5 acres.
Parental	W. Foster and N. Central Park aves.	11/12/13—No.	22017..	596.33 feet on Kimball ave. 275 feet on Maud ave. 247.5 feet on Poe st.
Thorp, Ole A.	W. Foster and Lincoln aves.	12/31/13—No.	23390..	248 feet on W. 61st st. 248 feet on W. 62nd st. 596 feet on S. Lincoln st. 596 feet on S. Winchester ave.
Wells	N. Ashland ave. and Augusta st.	9/ 3/13—No.	21837..	546 feet on Archer ave. 344 feet on W. 37th st. 520 feet on E. Leavitt st.
Site	Wellington and N. Lamon aves.	10/ 1/13—No.	21817..	880 feet on N. Paulina st. 125 feet on Rokeby st 125 feet on Beta st. 250 feet on Addison ave.
Site	Wellington and N. Sayre aves.	9/17/13—No.	21487..	
Site	Kimball ave., extending from Leland to Wilson aves.	9/17/13—No.	21493..	
Site	Maud ave. and Poe st.	9/ 3/13—No.	21842..	
Site	61st, 62nd and Lincoln sts. and Win- chester ave.	9/ 3/13—No.	21343..	
Site	37th st., Leavitt st. and Archer ave.	9/ 3/13—No.	21344..	
Site	Paulina st., Chase and Bryan aves.	8/ 6/13—No.	21238..	
Site	Addison ave., Rokeby and Beta sts.	9/ 3/13—No.	21341..	

SITES. TABLE II.

NEW SITES AND ADDITIONS TO OLD SITES WHICH WERE ORDERED DURING THE YEAR ENDED JUNE 30, 1912, TO BE ACQUIRED UNDER THE EMINENT DOMAIN LAW OR BY DIRECT PURCHASE—CONDEMNATION PROCEEDINGS PENDING.

Name of School or Site.	Location.	Order for Condemnation or Direct Purchase.	Frontage.
Arnold	Center a	6/12/12—No. 18285..	22 feet on Orchard st.
Columbus	Augusta	17287..	72 feet on Augusta st.
Hammond	W. 21st	18139..	50 feet on W. 21st pl.
Mandare	Hudson	18140..	50 feet on Hudson ave.
Ryerson	Lawndale ave. and Huron st.....	0/12/12—No. 18289..	50 feet on N. Lawndale ave.
Site	80th and 81st sts., Jeffrey and Central ave. 6/26/12—No. 18352..		{ 148.25 feet on Jeffrey ave. 248.22 feet on Chappel ave.

STATEMENT OF COST PER PUPIL FOR YEAR 1913-1914.
Department of Administration—Bureau of Audit.

Line No.	SCHOOLS.	Number of Teachers.	Average Daily Attendance	Average Number of Pupils to Teacher.	INSTRUCTION		Engineers' and Janitors' Salaries	OPERATION			TOTAL	MAINTENANCE		Line No.
					Teachers' Salaries	Educational Supplies		Fuel	School House Supplies and Light	Overtime Engineers and Janitors		General Repairs (Not Included in Total)		
1	(a) Normal School.....	36	478.4	13.3	247.52	13.39	20.78	14.41	3.51	1.21	301.32	4.37	1	
HIGH SCHOOLS—														
2	Austin	28	942.8	33.6	72.21	1.89	5.01	1.55	1.17	.27	82.10	2.69	2	
3	Bowen	28	760.2	27.2	69.02	5.06	13.23	3.55	3.93	.07	94.90	2.60	3	
4	Calumet	17	322.9	19.0	114.71	4.03	8.08	1.93	1.17	.24	130.19	5.09	4	
5	Crane	63	1,154.5	18.6	103.44	4.85	9.81	2.51	.74	.14	121.49	3.16	5	
6	Curtis	19	505.5	26.6	69.49	2.62	4.93	1.87	.91	.10	79.92	2.64	6	
7	Englewood	52	1,329.4	25.6	84.13	1.85	5.73	1.89	1.27	.17	95.09	3.39	7	
8	Flower	14	141.9	10.1	149.96	17.22	22.98	8.15	2.83	.....	201.19	9.42	8
9	(b) Harrison.....	24	630.6	26.3	55.71	13.30	3.43	7.81	0.90	.09	83.24	1.67	9	
10	Hyde Park	61	1,823.5	30.0	67.31	10.13	6.69	2.63	1.85	.21	83.76	3.31	10	
11	Lake	31	682.5	22.0	87.44	3.37	13.17	4.02	.64	.34	109.53	4.34	11	
12	Lake View	34	1,011.3	30.0	70.86	1.54	5.61	2.19	1.67	.13	82.05	2.26	12	
13	Lane	62	1,232.2	20.7	90.90	3.37	10.24	2.44	.82	.19	113.96	3.57	13	
14	Marshall	41	1,086.0	26.5	67.92	2.33	5.54	1.72	.64	.23	78.43	4.67	14	
15	McKinley	59	1,819.0	14.0	73.83	1.36	7.79	2.50	.92	.20	86.60	2.16	15	
16	Medill	30	722.8	24.1	72.55	2.22	5.30	1.17	.53	.14	81.96	4.76	16	
17	(c) Morgan Park.....	5	153.6	30.7	16.21	.06	1.04	.....	.04	.....	17.35	.01	17
18	Parker.....	27	800.9	30.0	54.33	3.02	2.09	1.29	.13	.04	61.00	.46	18	
19	Phillips.....	57	1,456.7	26.6	77.46	2.20	5.34	1.03	1.16	.16	87.40	2.59	19	
20	Schurz.....	53	1,437.8	27.1	59.35	3.24	7.79	1.83	2.67	.24	75.17	2.13	20	
21	Senn.....	49	1,442.0	29.4	53.40	17.14	8.61	3.49	2.71	.09	85.44	4.25	21	
22	Tuley.....	25	803.4	32.3	67.72	1.34	5.49	1.22	.93	.03	76.41	1.05	22	
23	Waller.....	25	704.5	28.2	79.29	1.34	5.69	1.65	.73	.07	83.82	5.16	23	
24	(d) Apprentices.....	.....	d221.1	.....	17.30	1.63	.....	.....	.....	.....	13.93	.....	24
25	Special Teachers.....	57	.....	.....	5.04	.....	.....	.....	.....	.....	5.04	.....	25
26	(e) Average.....	.....	e20,035.5	.....	73.40	5.13	7.08	2.37	1.39	.17	94.54	3.09	26
27	Parental.....	26	313.2	12.0	103.44	90.02	72.21	13.13	3.79	.....	232.59	13.57	27
28	Worthy.....	7	99.2	14.2	159.77	12.67	60.27	19.63	6.67	.....	259.04	6.39	28

STATEMENT OF COST PER PUPIL FOR YEAR 1913-1914—Continued.
Department of Administration—Bureau of Audit.

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PUBLIC SCHOOLS.

Line No.	SCHOOLS.	Number of Teachers.	Average Daily Attendance	Average Number of Pupils to Teacher	INSTRUCTION		OPERATION				TOTAL	MAINTENANCE	Line No.
					Teachers' Salaries	Educational Supplies	Engineers' and Janitors' Salaries	Fuel	School House Supplies and Light	Overtime Engineers and Janitors			
ELEMENTARY—													
29	Adams	27	1,009.7	40.7	30.41	.90	3.64	1.00	.02	.02	36.59	1.69	29
30	Agassiz	26	1,084.5	41.7	29.71	.98	3.08	1.25	.54	.12	35.68	1.55	30
31	Albany Avenue	15	554.1	37.0	25.57	.97	.39	.....	.08	.....	26.81	.88	31
32	Alcott	21	885.8	40.0	24.66	.74	3.79	1.27	.26	.....	40.72	2.15	32
33	Altgeld	29	1,149.5	39.7	31.04	.80	3.30	.99	.22	.02	37.37	1.51	33
34	Anderson	30	1,337.6	44.6	28.29	.89	2.67	.92	.41	.....	38.18	1.30	34
35	Armour	21	964.9	46.0	26.83	.80	3.99	1.34	.50	.....	38.68	1.78	35
36	Armstrong	15	592.1	36.8	35.33	1.36	6.11	2.29	1.17	.14	46.40	4.74	36
37	Arnold	23	982.1	40.5	31.02	.71	3.30	1.48	.25	.01	36.77	1.04	37
38	Auburn Park	5	224.3	44.9	29.83	1.67	3.81	.94	.59	.11	37.02	2.01	38
39	Audubon	27	1,089.0	40.3	29.66	.87	3.58	.72	.60	.....	35.87	.93	39
40	Avondale	32	1,272.7	39.8	30.43	.81	3.43	1.08	.17	.08	36.11	.65	40
41	Bancroft	19	783.2	41.2	30.88	.95	5.46	2.05	.34	.04	36.53	1.46	41
42	Barnard	15	576.4	38.4	34.98	.86	2.82	1.01	.36	.....	38.73	1.08	42
43	Bass	24	998.1	41.6	28.90	.71	3.00	1.07	.33	.01	34.13	.75	43
44	Beale	31	1,303.8	42.2	28.86	.87	5.37	2.28	.33	.....	41.67	.69	44
45	Beaubien	20	783.9	39.2	32.93	.80	3.46	.92	.33	.01	33.16	2.68	45
46	Beldier	15	633.8	42.6	32.79	.66	3.46	1.57	.21	.08	40.66	1.65	46
47	Belding	21	799.9	38.1	33.53	.69	4.60	1.67	.31	.....	40.66	.47	47
48	Bismarck	24	975.2	40.6	26.90	.92	3.04	1.11	.20	.08	31.88	1.28	48
49	Blaine	29	1,210.8	41.8	31.51	.73	3.41	1.07	.24	.01	36.86	3.51	49
50	Bradwell	22	896.2	40.7	29.05	.99	3.80	1.55	.44	.01	36.86	2.09	50
51	Bradnard	15	621.2	41.4	29.87	.72	3.57	1.55	.41	.....	35.63	2.09	51
52	Brenan	7	276.8	39.5	37.90	1.12	7.91	2.35	.55	.01	49.84	.61	52
53	Brentano	34	1,346.1	39.6	27.79	.82	3.40	1.51	.34	.08	38.94	2.32	53
54	Brown	23	1,039.3	46.1	23.04	.83	2.40	1.01	.22	.....	32.60	2.32	54
55	Brownell	11	406.2	36.9	37.98	1.41	5.00	1.51	.66	.08	46.54	1.22	55
56	Bryant	33	1,376.4	43.0	30.41	1.15	3.69	1.13	.66	.01	36.77	1.07	56
57	Bryn Mawr	10	349.6	35.0	30.49	2.33	6.66	5.33	.66	.08	45.53	2.73	57
58	Burke	24	908.2	41.6	30.33	.67	4.41	1.49	.41	.04	37.84	1.13	58
59	Burley	19	786.7	39.8	30.01	.97	3.99	1.08	.13	.06	36.19	.61	59
60	Burns	32	1,393.8	43.2	28.40	.74	6.10	1.00	.20	.08	38.46	.69	60
61	Burnside	20	791.1	39.6	29.89	1.39	4.48	2.88	.32	.06	39.08	3.44	61
62	Burr	37	1,455.5	39.3	36.11	1.39	4.19	1.64	.38	.79	41.93	1.63	62
63	Burroughs	13	690.3	35.9	34.43	1.25	6.19	2.55	.39	.23	34.56	.68	63
64	Byford	21	802.6	41.1	27.91	.80	3.36	1.48	.29	.01	38.68	.78	64
65	Calhoun	23	851.1	38.7	32.34	.82	4.12	2.35	.19	.01	34.77	1.14	65
66	Cameroon	26	1,100.9	42.3	28.99	.68	3.08	1.60	.23	.01	35.95	1.58	66
67	Carpenter	24	1,082.9	43.9	30.31	.72	3.46	1.11	.35	.01	35.95	1.58	67
68	Carter Practice	27	1,203.6	44.8	30.73	1.32	4.66	1.79	.46	.01	38.97	1.33	68

68	Chalmers.....	29	1,196.0	41.3	27.44	71	2.49	19	61	44	1.16	72	71	69
69	Chase	18	767.1	43.1	29.68	72	3.59	20	62	45	1.64	73	72	70
70	Chicago Lawn	16	682.6	39.6	28.88	73	4.88	21	63	46	1.87	74	73	71
71	Charles	46	1,696.6	44.1	22.70	74	3.17	22	64	47	1.89	75	74	72
72	Clay.....	9	366.9	40.7	29.24	75	3.61	23	65	48	1.76	76	75	73
73	Cleveland.....	51	1,862.6	49.0	27.82	76	3.59	24	66	49	2.54	77	76	74
74	Cohman.....	15	615.5	40.4	30.66	77	3.78	25	67	50	4.16	78	77	75
75	Columbus.....	33	1,291.8	40.4	26.64	78	3.45	26	68	51	3.64	79	78	76
76	Coonley.....	27	1,121.2	42.6	20.26	79	3.01	27	69	52	1.80	80	79	77
77	Cooper.....	19	787.9	43.0	22.99	80	4.41	28	70	53	1.00	81	80	78
78	Copernicus.....	26	1,067.1	41.8	24.44	81	3.53	29	71	54	.88	82	81	79
79	Corkery.....	28	1,467.0	43.8	25.51	82	2.60	30	72	55	1.53	83	82	80
80	Cornell.....	26	1,056.6	40.6	30.25	83	2.60	31	73	56	.84	84	83	81
81	Cornell.....	18	705.0	39.7	30.67	84	4.20	32	74	57	1.44	85	84	82
82	Curtis.....	20	847	42.4	26.78	85	3.75	33	75	58	1.07	86	85	83
83	Dante.....	25	1,467.9	41.9	26.65	86	2.94	34	76	59	.63	87	86	84
84	Darwin.....	27	1,076.0	39.8	29.16	87	4.26	35	77	60	.69	88	87	85
85	Davis.....	14	683.7	41.7	25.52	88	3.15	36	78	61	1.55	89	88	86
86	Delano.....	26	699.0	37.6	26.53	89	5.64	37	79	62	1.29	90	89	87
87	Dewey.....	21	901.9	39.2	22.80	90	4.82	38	80	63	1.36	91	90	88
88	Doolittle.....	24	951.4	39.6	31.23	91	3.99	39	81	64	1.85	92	91	89
89	Dore	22	789.4	35.9	33.97	92	3.64	40	82	65	1.02	93	92	90
90	Douglas.....	23	856.2	38.9	31.29	93	4.78	41	83	66	1.11	94	93	91
91	Drake	21	837.5	39.9	32.53	94	4.59	42	84	67	1.02	95	94	92
92	Drummond	20	837.3	41.9	28.90	95	3.46	43	85	68	1.23	96	95	93
93	Dunning	10	862.6	34.8	32.41	96	3.99	44	86	69	6.57	97	96	94
94	Earle.....	25	1,040.8	41.6	28.55	97	5.01	45	87	70	1.14	98	97	95
95	Emerson	12	445.6	37.1	31.07	98	3.32	46	88	71	2.09	99	98	96
96	Emmet	16	633.4	39.6	29.72	99	4.10	47	89	72	1.57	100	99	97
97	Ericson	20	794.1	39.7	30.02	100	5.75	48	90	73	2.90	101	100	98
98	Everett	17	715.5	42.1	32.72	101	3.48	49	91	74	2.36	102	101	99
99	Fallon	14	573.5	41.0	34.98	102	3.74	50	92	75	2.46	103	102	100
100	Fallon (S).....	2	43.0	41.5	54.53	103	5.78	51	93	76	2.46	104	103	101
101	Farragut	30	1,259.7	42.0	30.37	104	23.28	52	94	77	2.99	105	104	102
102	Farran.....	20	772.0	38.6	31.35	105	2.64	53	95	78	1.23	106	105	103
103	Felsenthal.....	21	809.0	41.4	31.64	106	4.68	54	96	79	1.71	107	106	104
104	Feld.....	18	723.0	40.2	31.05	107	3.65	55	97	80	1.34	108	107	105
105	Fiske.....	26	1,110.9	42.7	28.52	108	4.47	56	98	81	2.94	109	108	106
106	Forrestville.....	25	1,034.0	41.4	31.66	109	3.33	57	99	82	.75	110	109	107
107	Foster	35	1,414.7	40.4	33.69	110	3.19	58	100	83	2.03	111	110	108
108	Franklin.....	30	1,229.9	41.0	32.71	111	4.09	59	101	84	1.74	112	111	109
109	Froebel	19	760.2	40.0	29.65	112	3.32	60	102	85	2.56	113	112	110
110	Fuller	12	410.0	34.2	34.28	113	3.67	61	103	86	.89	114	113	111
111	Fulton	30	1,301.9	43.4	26.89	114	5.32	62	104	87	1.57	115	114	112
112	Gage Park	18	476.7	36.7	26.91	115	3.29	63	105	88	.46	116	115	113
113	Gallistel.....	29	1,197.2	41.3	27.53	116	4.02	64	106	89	4.73	117	116	114
114	Garfield.....	37	1,541.5	41.7	26.02	117	4.20	65	107	90	.99	118	117	115
115	Gary.....	34	1,404.2	43.9	24.78	118	3.67	66	108	91	.62	119	118	116
116	Gladstone.....	35	1,443.7	41.2	27.65	119	3.70	67	109	92	.68			
117	Goethe.....	24	923.5	38.5	32.28		3.96	68	110	93	1.42			
118	Goodrich.....	30	1,234.2	42.8	24.05		3.40	69	111	94	.94			
119							3.13	70	112	95	2.90			

STATEMENT OF COST PER PUPIL FOR YEAR 1913-1914—Continued.
Department of Administration—Bureau of Audit.

Line No.	SCHOOLS.	Number of Teachers.	Average Daily Attendance	Average Number of Pupils to Teacher	INSTRUCTION		OPERATION				TOTAL	MAINTENANCE		Line No.
					Teachers' Salaries	Educational Supplies	Engineers' and Janitors' Salaries	Fuel	School House Supplies and Light	Overtime Engineers and Janitors		General Repairs (Not Included in Total)		
120	Goudy	11	680.5	61.9	27.86	1.10	4.30	1.71	.90	.....	35.17	.99	120
121	Graham	26	908.9	38.2	31.65	1.44	4.45	1.35	.71	.15	39.75	2.09	121	
122	Grant	15	688.7	42.6	26.97	.88	4.07	1.30	.85	.01	33.58	8.18	122	
123	Gray	29	1,066.6	38.1	25.17	.86	4.10	.99	.30	.08	31.47	1.61	123	
124	Greeley	22	949.7	43.2	30.50	.78	2.81	1.19	.83	.02	35.64	.59	124	
125	Greene.....	18	767.0	42.6	28.62	1.18	3.66	1.05	.25	.02	34.78	1.07	125	
126	Gresham	17	688.7	37.6	34.07	.86	5.47	1.65	.40	.....	42.45	1.13	126
127	Haines Practice.....	31	1,221.0	39.4	34.44	1.50	3.85	.94	.71	.08	41.47	4.74	127	
128	Hamilton	26	1,074.8	41.3	30.92	1.13	3.33	1.17	.27	.08	36.85	.94	128	
129	Hamline	21	807.0	38.4	32.81	1.02	4.74	1.36	.63	.02	40.68	1.34	129	
130	Hammond	25	1,004.7	43.8	25.79	.89	4.16	1.23	.59	.02	32.71	2.26	130	
131	Hancock	9	347.5	38.6	31.81	2.08	4.61	1.87	.24	.....	40.66	1.62	131
132	Hanson Park—Mont Clare.....	12	403.5	33.6	33.67	.99	4.11	1.59	.22	.....	40.38	1.46	132
133	Harper	37	1,498.5	40.5	25.20	.65	3.57	.99	.46	.04	30.91	2.47	133	
134	Harvard	15	579.1	38.6	33.03	.98	4.06	1.61	.16	.....	40.56	.23	134
135	Haugan	19	749.7	39.5	29.24	1.02	4.47	1.85	.51	.12	37.21	1.14	135	
136	Haven	14	508.9	36.3	35.43	1.21	6.12	0.72	.81	.04	45.33	6.83	136	
137	Hawthorne	25	1,080.0	41.2	34.81	.69	3.34	.99	.19	.08	39.54	.33	137	
138	Hayes	14	536.8	36.2	31.67	1.01	4.06	1.57	.31	.....	38.68	.89	138
139	Hayt.....	28	1,115.7	39.8	30.43	.69	4.04	1.41	.23	.06	36.83	.87	139	
140	Heasley.....	11	398.3	35.8	32.07	.91	4.85	1.31	.24	.....	39.33	1.39	140
141	Healy.....	25	1,087.2	41.5	32.42	1.15	3.66	1.01	.33	.....	38.62	1.34	141
142	Hedges.....	25	1,051.4	42.1	30.82	1.00	4.18	1.21	.41	.01	37.68	.51	142	
143	Hendricks.....	14	516.7	36.9	37.65	1.84	5.82	1.37	.91	.....	47.59	1.77	143
144	Henry.....	31	1,354.5	48.7	27.04	.80	3.24	1.27	.32	.06	32.61	1.57	144	
145	Heral.....	24	485.3	20.2	22.10	1.39	2.16	1.30	.73	.....	27.68	2.03	145
146	Holden.....	31	1,135.3	36.6	35.33	1.24	4.47	1.31	.63	.....	43.01	1.95	146
147	Holmes.....	22	926.2	42.1	31.35	.78	3.70	1.36	.76	.07	38.82	2.39	147	
148	Howe.....	22	946.8	43.0	23.86	.71	3.90	1.69	.27	.15	35.48	.51	148	
149	Howland.....	39	1,001.0	41.1	27.51	.90	2.80	1.18	.38	.06	32.60	1.34	149	
150	Irving.....	33	1,356.6	41.1	25.73	1.02	3.82	1.23	.45	.07	32.42	2.03	150	
151	Irving Park.....	27	1,139.1	42.2	27.39	.88	2.72	1.06	.35	.04	32.39	1.64	151	
152	Jackson.....	46	2,113.7	46.0	25.53	1.13	2.88	.92	.44	.02	30.32	.85	152	
153	Jahn.....	23	687.6	38.6	31.71	1.06	4.83	1.06	.42	.04	39.11	1.61	153	
154	Jefferson.....	37	1,351.9	41.9	28.77	.77	2.92	1.02	.37	.01	33.26	.69	154	
155	Jenner.....	33	1,372.8	41.6	24.02	1.00	3.16	.83	.53	.....	39.64	.60	155
156	Jirka.....	18	767.1	42.1	30.90	1.22	5.00	1.23	.58	.04	39.02	1.71	156	
157	Jones.....	14	446.6	31.9	36.57	1.49	6.30	1.66	1.33	.37	47.97	3.79	157	
158	Jungman.....	24	1,110.4	46.3	27.73	.80	3.46	0.27	.50	.01	33.77	1.01	158	
159	Keeler Avenue.....	11	412.2	37.5	34.39	1.53	3.32	.79	.30	.....	35.94	1.61	159
160	Keth.....	10	392.5	39.9	30.73	.90	6.33	1.51	.79	.01	44.56	2.63	160	

161	Kenwood.....	539.0	37.6	33.08	1.01	4.83	1.76	.76	.03	41.41	1.46	161
162	Kerahaw.....	1,167.0	40.3	33.11	.80	3.23	.84	.19	.....	37.16	1.48	162
163	Key.....	533.3	41.6	31.91	1.06	4.88	1.36	.17	.06	39.35	.77	163
164	King.....	538.4	37.3	33.36	1.00	4.34	1.39	.31	.....	40.90	1.48	164
165	Kinsie.....	447.8	34.4	33.47	1.06	3.29	1.68	.94	.18	45.68	2.08	165
166	Knickerbocker.....	537.7	39.3	31.18	.81	4.48	1.18	.35	.....	37.85	1.11	166
167	Kohn.....	980.4	39.2	37.40	.93	5.88	1.36	.32	.04	36.54	2.85	167
168	Komensky.....	1,040.1	40.0	31.87	.79	4.06	1.81	.39	.01	36.43	1.88	168
169	Koschusko.....	923.5	40.1	37.33	.64	4.72	1.29	.53	.01	34.53	.75	169
170	Kosminski.....	821.8	37.4	31.36	.64	3.87	.96	.35	.06	37.11	1.41	170
171	La Fayette.....	1,673.1	39.8	27.80	.77	2.89	.83	.23	.01	33.02	.68	171
172	Langland.....	728.8	42.9	28.06	.88	3.98	1.49	.39	.03	34.82	1.10	172
173	La Salle.....	699.9	36.8	32.08	.51	4.42	1.57	.45	.....	39.08	1.83	173
174	Lawson.....	1,938.3	46.9	26.04	.45	2.09	.84	.12	.....	29.14	.75	174
175	Lewis-Champlin.....	907.1	37.8	31.81	.98	4.75	1.84	.20	.06	39.53	1.50	175
176	Lobby.....	1,083.1	41.7	29.99	1.00	3.22	1.43	.39	.01	36.04	1.22	176
177	Lincain.....	873.3	39.7	33.30	.99	3.91	1.34	.33	.....	39.86	1.34	177
178	Linne.....	725.4	36.8	33.61	.88	4.36	1.27	.32	.15	40.54	1.60	178
179	Lloyd.....	879.3	36.6	36.17	.96	4.95	1.71	.36	.03	34.22	1.21	179
180	Logan.....	721.9	36.1	33.34	1.08	3.46	1.08	.20	.....	39.63	1.08	180
181	Longfellow.....	705.3	41.5	32.10	.85	4.09	1.42	.44	.....	38.90	.70	181
182	Lowell.....	1,077.2	43.1	27.33	.94	3.06	1.93	.32	.01	33.59	.78	182
183	Madison.....	671.3	35.3	33.89	1.11	4.86	1.66	.42	.03	41.96	1.66	183
184	Manierre.....	728.4	42.9	31.64	.85	3.98	1.43	.46	.01	33.32	1.33	184
185	Mann.....	678.6	37.4	36.17	0.00	5.84	2.30	.40	.01	45.72	1.37	185
186	Marquette.....	1,453.0	41.5	24.45	1.16	2.90	.98	.35	.05	29.89	1.07	186
187	Marsh.....	428.6	35.7	33.44	1.22	9.39	2.16	.92	.17	47.30	3.68	187
188	Marshall.....	566.2	43.6	31.65	.68	2.68	.81	.31	.13	36.24	1.73	188
189	May.....	509.6	39.2	30.77	.62	5.33	1.61	.44	.11	39.13	.91	189
190	Mayfair.....	399.7	36.3	31.18	.62	4.52	.71	.32	.05	37.55	1.24	190
191	McAlister.....	431.0	37.0	29.70	1.44	6.25	2.12	.82	.02	40.85	1.68	191
192	McClellan.....	653.1	41.0	29.60	1.25	5.29	1.62	.95	.01	36.73	3.02	192
193	McCormick.....	1,266.1	42.2	26.01	.79	3.47	1.06	.36	.09	31.72	.64	193
194	McCosh.....	1,086.2	43.4	30.09	1.61	2.61	.97	.33	.01	35.66	1.40	194
195	McLaren.....	1,588.7	41.8	25.73	.66	3.09	1.17	.34	.04	31.02	2.75	195
196	McPherson.....	919.4	40.0	32.52	.93	3.57	1.19	.13	.....	38.39	.80	196
197	Medill.....	836.3	44.8	26.30	.78	2.56	.55	.27	.07	30.68	.40	197
198	Mitchell.....	1,505.0	43.0	27.99	.69	2.75	.98	.17	.01	32.54	.15	198
199	Monroe.....	1,266.9	43.7	27.65	.93	2.90	.90	.24	.02	32.69	.73	199
200	Montefiore.....	815.1	42.9	28.29	.77	4.15	1.21	.84	.04	35.30	2.62	200
201	Moos.....	859.5	39.1	32.53	1.10	4.65	1.25	.63	.12	40.18	2.62	201
202	(c)Morgan Park.....	632.6	35.1	4.46	.01	.45	.....	.01	.....	4.98	.96	202
203	Morris.....	707.4	39.3	33.69	.87	4.09	1.40	.27	.01	40.23	.81	203
204	Morse.....	766.5	36.5	33.20	.96	4.63	1.53	.44	.09	40.85	1.13	204
205	Moseley.....	531.0	33.2	38.82	1.21	5.72	1.77	.60	.....	43.12	1.40	205
206	Motley.....	902.7	41.0	28.30	.81	3.57	.98	.40	.01	38.86	.83	206
207	Mozart.....	1,126.3	43.3	22.42	.64	3.00	1.22	.34	.12	27.74	1.39	207
208	Mulligan.....	762.7	40.1	32.60	.98	3.40	1.30	.51	.....	38.49	.77	208
209	Nash.....	1,119.0	41.4	31.17	.81	3.23	.88	.19	.03	36.51	1.23	209
210	Nettelhorst.....	890.4	40.5	32.78	.71	4.08	1.65	.32	.10	39.64	2.53	210
211	Newberry.....	1,041.8	4.34	28.36	1.28	3.08	1.11	.31	.03	34.16	.97	211

STATEMENT OF COST PER PUPIL FOR YEAR 1913-1914—Continued.
Department of Administration—Bureau of Audit.

Line No.	SCHOOLS.	Number of Teachers.	Average Daily Attendance	Average Number of Pupils to Teacher.
212	Nixon.....	30	1,312.8	4.87
213	Nobel.....	30	1,106.9	3.99
214	Norwood Park.....	9	319.6	35.5
215	Oakland.....	14	638.5	35.4
216	Ogden.....	14	504.0	36.0
217	Oglesby.....	30	818.7	40.7
218	Otis.....	27	1,145.7	43.4
219	Parker Practice.....	26	1,101.1	43.4
220	Parkman.....	19	717.5	37.3
221	Park Manor.....	23	831.3	37.3
222	Parkside.....	13	502.7	38.7
223	Peabody.....	16	747.6	41.5
224	Penn.....	22	1,470.9	43.0
225	Pickard.....	26	1,030.4	41.6
226	Plamondon.....	14	506.3	42.5
227	Poe.....	19	387.9	35.3
228	Prescott.....	19	782.5	40.1
229	Pulaski.....	08	686.6	39.3
230	Pullman.....	21	887.6	40.8
231	Rafter.....	29	1,116.0	38.5
232	Ravenswood.....	23	850.2	38.7
233	Ray.....	22	851.0	38.7
234	Raymond.....	15	655.6	39.4
235	Revere.....	16	611.0	39.2
236	Rogers.....	30	1,335.6	44.9
237	Ryder.....	30	347.3	34.3
238	Byrson.....	24	905.5	49.3
239	Sawyer Avenue.....	16	808.7	33.1
240	Seammon.....	16	303.2	39.3
241	Scanlan.....	25	1,048.8	42.0
242	Schiller.....	25	1,072.3	41.3
243	Schley.....	34	1,441.2	43.4
244	Schneider.....	19	774.7	40.7
245	Scott.....	16	623.3	41.6
246	Seward.....	22	739.9	39.4
247	Sexton, J. A.....	16	509.6	37.3
248	Shakespeare.....	16	635.4	41.9
249	Sheldon.....	6	269.6	52.3
250	Sheridan, Mrs.....	22	900.9	41.0
251	Sheridan, Phil.....	25	1,139.7	40.9
252	Sherman.....	30	888.0	41.1
253	Sherwood.....	26	813.4	40.9
254	Shields.....	25	899.3	37.9

RECAPITULATION.

STATEMENT OF COST PER PUPIL FOR YEAR 1913-1914—Continued.
Department of Administration—Bureau of Audit.

Line No.	SCHOOLS.	Number of Teachers.	Average Daily Attendance	Average Number of Pupils to Teacher.	INSTRUCTION		OPERATION			TOTAL	MAINTENANCE	Line No.
					Average Number of Pupils to Teacher.	Teachers' Salaries.	Educational Supplies	Engineers' and Janitors' Salaries	Fuel	School House Supplies and Light	Overtime Engineers and Janitors	
302	(a) Normal.....	.....	478.4	.....	247.52	13.30	.....	20.76	14.41	8.51	1.21	302
303	High School.....	.....	20,065.5	.....	78.40	6.13	.....	7.06	2.87	1.30	.17	303
304	Parochial.....	.....	413.2	.....	108.44	90.02	.....	72.21	18.18	3.79	.....	304
305	Worthy.....	.....	99.2	.....	139.77	12.67	.....	60.27	19.06	6.67	.....	305
306	(h) Elementary.....	.....	240,471.4	.....	29.69	1.02	.....	8.82	1.25	.40	.04	306
307	Supt., Spec'l Teachers, Normal Extension Board of Examiners.....	.....	251,447.7	.....	.....	.....	.....	.....	.....	.....	.....	307
308	General Expense.....	.....	251,447.7	.....	.....	.....	.....	.....	.....	.....	.....	308
309	Grand Total on Basis of Average Daily Attendance.....	.....	251,447.7	.....	248.80	1.06	.....	4.29	1.36	.49	(1.33) .95	309
310	Evening High.....	.....	6,472.1	.....	11.54	1.39	.....	1.17	.32	.66	.....	310
311	Evening Elementary.....	.....	12,561.3	.....	7.51	.56	.....	.86	.48	.40	.....	311
312	Vacation.....	.....	10,734	.....	2.23	.60	.....	.38	.....	.....	.....	312
313	(i).....	.....	866.0	.....	16.76	.04	.....	.70	.....	.....	.....	313
314	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	314
315	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	315
316	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	316

- (a) Normal College and extra salaries teachers Practice School.
 (b) Old Farragut, 8 months.
 (c) For 2 months.
 (d) For 8 months. In Total, for 200 days 96.8.
 (e) Total.
 (f) Branch. Operation expense of main School in Rental.
 (g) Transportation, etc.
 (h) Including Detention Home School and Prevocational.
 (i) Enrollment.
 (j) Livery, General Expense, etc.
 (k) For 5 months.

Report of the Committee on Finance

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ASSEMBLY HALL, FROM HEARST - CARTER H. HARRISON TECHNICAL HIGH SCHOOL,
Marshall and W. Twenty-fourth Boulevards, Chicago.

ANNUAL REPORT OF THE COMMITTEE ON FINANCE

Your Committee on Finance presents the following Report in detail of the Receipts and Expenditures on account of the Board of Education for the School Year ending June 30, 1914, as prepared by the acting Auditor.

SCHOOL TAX FUND—BUILDING ACCOUNT.

Cash balance July 1, 1913.....	\$ 629,770.92	
Receipts.		
Tax Levy 1912, School Tax Fund.....	\$ 1,555,566.11	
Tax Levy 1913, School Tax Fund.....	2,205,821.88	
Miscellaneous—		
Rebate on Special Assessments	\$ 6,805.10	
Sale of Buildings (condemnation)	51,238.00	
Forfeited deposits, etc.....	5,146.42	
Refunds (Morgan Park).....	3,581.86	
Refunds (Unexpired Ins. Div. of Supplies).....	684.75	
	<u>67,855.63</u>	
From Temporary Loans.....		3,828,743.12
		<u>3,186,000.00</u>
Total Available		<u><u>\$ 7,644,514.04</u></u>
Expenditures.		
School Sites and condemnation Expense.....	\$ 1,257,671.98	
New Buildings	2,692,931.00	
Permanent Improvements	806,429.55	
Special Assessments	68,451.70	
General Repairs	523,655.16	
Rental of sites and buildings.....	68,961.71	
	<u>\$ 5,418,101.10</u>	
Interest on temporary loans.....		16,683.67
Temporary Loans		2,181,000.00
Cash Balance June 30, 1914.....		<u>28,729.27</u>
		<u><u>\$ 7,644,514.04</u></u>

SCHOOL TAX FUND—INDEBTEDNESS ACCOUNT.

Cash Balance July 1, 1913.....	\$ 3,792.67	
Receipts.		
Tax Levy, 1912, School Tax Fund.....		5,561.18
Total Available		<u><u>\$ 9,853.80</u></u>
Expenditures.		
Interest coupons	\$ 875.00	
Cash Balance June 30, 1914.....	<u>8,978.80</u>	
		<u><u>\$ 9,853.80</u></u>

PUBLIC SCHOOLS.

SCHOOL TAX FUND—EDUCATIONAL ACCOUNT.

Cash Balance July 1, 1913..... \$ 56,409.18

Receipts.

Tax Levy 1912, School Tax Fund.....\$ 4,816,173.29
 Tax Levy 1913, School Tax Fund..... 5,173,763.19
 Miscellaneous 36,048.99
 Tuition (Summer High Schools)..... 10,071.00
 Refund (Morgan Park)..... 16,697.70

10,052,754.17
 4,823,000.00

From Temporary Loans.....

Total Available

\$14,932,163.35

Expenditures.

Salaries, Superintendents and Teachers.....\$ 9,348,514.09
 Less High Schools and Special Studies..... 2,458,502.23

Salaries of Superintendents and Teachers
 (elementary schools)

\$ 6,895,011.86

High Schools.

Teachers Salaries\$ 1,580,514.13
 Educational Supplies 62,147.69
 Household Arts Supplies..... 3,129.13
 Technical Supplies 35,449.83

1,681,240.78

Chicago Normal College.

Teachers Salaries\$ 99,252.50
 Teachers College Extension..... 6,880.50
 Stenographer 1,128.71
 Assistant Librarian 900.00
 Care of grounds..... 900.00
 Medical examiners 392.00
 Supplies and printing..... 6,225.87

115,679.58

Evening Schools.

Teachers Salaries\$ 166,430.50
 Salaries, engineers and janitors..... 18,894.29
 Fuel and light..... 20,690.93
 Custodian 286.50
 Printing 1,517.83
 Rental of Typewriters..... 3,443.77
 Supplies 10,392.20
 Rental of Sewing Machines..... 214.50

221,370.52

Kindergartens.

Teachers Salaries\$ 308,710.46
 Equipment and supplies..... 9,470.24

318,180.70

Manual Training (Elementary).

Teachers Salaries\$ 119,675.14
 Stenographer 1,017.50
 Tools and equipment..... 8,013.87
 Lumber and supplies..... 22,012.95
 Construction materials 20,444.40

180,163.86

Parental School.

Teachers Salaries	\$ 33,965.19	
Employee Pay Roll	22,614.89	
Fuel and light	5,428.84	
Groceries	17,603.66	
Keep of Live Stock	4,160.99	
Clothing and equipment	4,192.40	
Telephone and supplies	2,386.70	
		<u>90,347.17</u>

Household Arts.

Teachers Salaries	\$ 113,868.28	
Stenographer	706.85	
Gas	8,000.00	
Equipment	5,000.91	
Sewing machines	1,715.00	
Supplies	16,968.30	
		<u>141,259.84</u>

Music.

Teachers Salaries	\$ 11,887.50	
Stenographer	465.00	
Piano Tuner	1,606.45	
Piano moving and supplies	816.72	
		<u>14,775.67</u>

Art.

Teachers Salaries	\$ 19,688.00	
Stenographer	465.00	
Supplies	16,922.40	
		<u>87,025.40</u>

Physical Education.

Teachers Salaries	\$ 52,686.03	
Stenographer	1,786.25	
Hand apparatus	12.52	
Supplies	637.47	
First aid cabinets	432.00	
		<u>55,504.27</u>

Department of the Deaf.

Teachers Salaries	\$ 38,467.13	
Supplies	4,510.99	
		<u>42,978.12</u>

Department of the Blind.

Teachers Salaries	\$ 6,367.50	
Car fare	720.00	
Supplies	302.42	
		<u>7,389.92</u>

Department of Child Study.

Teachers Salaries	\$ 9,115.00	
Stenographer	559.99	
Physical examinations	598.00	
Supplies	235.79	
		<u>10,503.78</u>

PUBLIC SCHOOLS.

Department of German.

Salary of Supervisor.....	\$ 2,800.00	
Teachers Salaries	5,533.00	
Stenographer	280.01	
		<u>8,613.01</u>

Continuation Schools.

Teachers Salaries	\$ 3,824.90	
Supplies	820.84	
		<u>4,645.74</u>

Correction of Defective Speech.

Teachers Salaries	7,823.25
-------------------------	----------

Detention Home.

Teachers Salaries	\$ 6,990.64	
Supplies	10.00	
		<u>7,000.64</u>

John Worthy.

Teachers Salaries	\$ 15,849.33	
Salaries, Engineers and Janitors.....	6,050.68	
Fuel and light.....	2,784.35	
Supplies and equipment.....	1,183.03	
		<u>25,867.37</u>

Schools for Crippled Children.

Teachers Salaries	\$ 12,734.25	
Transportation	14,408.25	
Lunches and supplies.....	1,462.24	
Medical examinations	48.00	
		<u>28,647.74</u>

Vacation Schools.

Teachers Salaries	\$ 23,885.85	
Salaries, Engineers and Janitors.....	4,104.70	
Excursions	2,306.00	
Bus hire	868.50	
Supplies	2,666.43	
		<u>33,831.48</u>

Social Centers.

Teachers Salaries	\$ 18,735.50	
Salaries, Engineers and Janitors.....	4,153.20	
Fuel and light.....	3,127.42	
Supplies	881.01	
		<u>26,397.13</u>

Subnormal Rooms.

Supplies	8,597.73
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Department of Examinations.

Salary of Examiner and assistants.....	\$ 11,908.50	
Stenographer	1,500.00	
Emergency clerks	530.61	
Supplies and printing.....	1,911.03	
		<u>15,850.14</u>

Penny Lunches.

Attendants	\$ 1,475.80	
Supplies	357.87	
	<hr/>	1,833.67

Compulsory Education.

Salaries	\$ 66,292.31	
Car tickets	2,650.00	
Supplies	934.41	
	<hr/>	69,876.72

Contingent Fund.

Bus hire	\$1,581.75	
Annual audit	135.00	
Civil Service Investigations.....	9,150.06	
Miscellaneous	2,136.30	
Springfield trips	361.29	
Funeral expenses	241.75	
Interest on loans.....	7,942.64	
Engrossing resolutions	300.00	
Sex Hygiene Congress.....	822.56	
State Fair premiums.....	240.00	
City Club Exhibit.....	45.00	
Educational investigations	143.75	
	<hr/>	\$ 23,100.10
Less transfer to Sex Hygiene. etc..	1,443.75	
	<hr/>	21,656.35
Sex Hygiene (6 mos.).....		9,021.00

Epileptic Children.

Supplies (6 mos.).....	\$ 108.50
Supplementary Reading	29,026.39
Maps, Globes and Reference Books.....	21,186.52
Fund Text Books.....	12,323.00
Salaries, Engineers and Janitors.....	1,055,309.49
Salaries, Bath Room Attendants.....	40,770.14
Salaries of watchmen	10,515.98
Official Salaries	112,369.94
Fuel	362,083.53
Lighting	55,534.20
Office Expense	32,041.00
School Supplies	57,914.37
School House Supplies.....	87,920.97
Printing and advertising.....	24,465.98
Apparatus and Furniture.....	3,686.83
Livery	11,003.79
Teachers Pension Fund.....	87,607.23
School Census (1914).....	87,655.21
Summer High Schools.....	15,015.75
	<hr/>
Total expenditures for Educational purposes.....	\$12,137,631.76
Less amount charged to School Fund Income	2,295,436.68
	<hr/>
Amount charged to Educational Account.....	\$ 9,842,195.08
Temporary Loans paid.....	4,823,000.00
Advances to Cooking Teachers.....	457.05
Advances to Election Commissioners.....	2,144.00
Cash Balance June 30, 1914.....	264,367.22
	<hr/>
Total	\$14,932,168.35

SPECIAL FUNDS—INCOME ACCOUNT.

Cash on hand June 30, 1913.....		\$	2,606.88
Receipts.			
For interest on principal invested on account of the several funds, as follows:			
Barnard	\$	40.00	
Bass		160.00	
Beldler		107.50	
Calhoun		20.00	
Carpenter		40.00	
Clarke		32.00	
Foster		302.00	
Holden		10.00	
Howland		40.00	
Jones		40.00	
Kozminski		28.00	
Moos		100.00	
Moseley		440.00	
Newberry		40.00	
Reese		80.00	
Schneider		10.00	
Sheldon		100.00	
Sullivan		12.00	
			1,601.50
		\$	4,208.38
Expenditures on account of the several funds, as follows:			
Bass	\$	23.00	
Beldler		149.44	
Carpenter		10.60	
Clarke		10.00	
Foster		212.60	
Moos		99.45	
Moseley		680.00	
Newberry		48.24	
Schneider		6.00	
Sheldon		78.55	
Gray		6.39	
			1,324.27
Cash in hands of City Treasurer. June 30, 1914			2,884.11
		\$	4,208.38

SPECIAL FUNDS—PRINCIPAL ACCOUNT.

The principal of the several funds at this date amounts to		\$	39,550.00
Invested as follows:			
Barnard Fund—			
Sanitary District 4% bond.....		\$	1,000.00
Bass Fund—			
2 8-10 South Park Commissioners 4%..	\$	2,800.00	
3-10 West Park Commissioners 4%...		300.00	
0-10 Sanitary District 4%.....		900.00	
			4,000.00
Beldler Fund—			
1 South Park Commissioners 4% bond..	\$	1,000.00	
3-10 Chicago General Corporate 4%...		300.00	
3-10 Sanitary District 4%.....		300.00	
3-5 City of Aurora 4½%.....		300.00	
1 1-5 Ridge Park 5%.....		600.00	
Cash on hand		200.00	
			2,700.00

COMMITTEE ON FINANCE.

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Calhoun Fund—		
5-10 Sanitary District 4%.....		500.00
Carpenter Fund—		
1 Sanitary District 4%.....		1,000.00
Clark Fund—		
8-10 Sanitary District 4%.....		800.00
Foster Medal Fund—		
2 2-10 South Park Commissioners 4%..\$	2,200.00	
4 1-4 Chicago General Corporate 4%....	4,250.00	
6-10 Sanitary District 4%.....	600.00	
1 Sanitary District 4%.....	500.00	
		7,550.00
2-10 Sanitary District 4%.....\$	200.00	
1-20 Chicago General Corporate 4%..	50.00	
		250.00
Howland Fund—		
1 West Park Commissioners 4%.....		1,000.00
Jones Fund—		
1 South Park Commissioners 4%.....		1,000.00
Kozminski Fund—		
4-10 Sanitary District 4%.....\$	400.00	
3-10 Chicago General Corporate 4%...	300.00	
		700.00
Moseley Book Fund—		
11 South Park Commissioners 4%.....		11,000.00
Moos Memorial Fund—		
2 Chicago Railways Company 5%.....		2,000.00
Newberry Fund—		
1 Sanitary District 4%.....		1,000.00
Rees Fund—		
2 Sanitary District 4%.....		2,000.00
Schneider Fund—		
1-4 Sanitary District 4%.....		250.00
Sheldon Fund—		
2 1-2 Sanitary District 4%.....		2,500.00
Sullivan Fund—		
3-10 Sanitary District 4%.....		300.00
		<u>\$ 39,550.00</u>

JONATHAN BURR FUND INCOME ACCOUNT.

Cash on hand June 30, 1913.....	\$2,653.51	
Receipts.		
From interest on investments.....	1,201.16	
	<u>\$ 3,044.67</u>	
Payments—Books, etc.	\$3,209.00	
Cash in hands of City Treas., June 30, 1914	645.67	
	<u>\$ 3,044.67</u>	

INCOME ACCOUNTS.

Summary of Receipts and Expenditures for School Year 1913-14.

Cash Balance, July 1, 1913—	
School Tax Fund, Building Account.....\$	629,770.92
School Tax Fund, Indebtedness Account.....	8,792.67
School Tax Fund, Educational Account.....	56,409.18
School Fund, Income Account.....	587,041.71
Special Funds, Income Account.....	2,606.88
Jonathan Burr Fund, Income Account.....	2,653.51
	<u>\$ 1,282,274.87</u>

PUBLIC SCHOOLS.

Receipts.

School Tax Fund, Building Account.....	\$ 8,828,743.12	
School Tax Fund, Indebtedness Account.....	5,561.13	
School Tax Fund, Educational Account.....	10,052,754.17	
School Fund Income Account.....	1,852,779.14	
Special Funds, Income Account.....	1,601.50	
Jonathan Burr Fund, Income Account.....	1,291.16	
		\$15,742,730.22
From Temporary Loans, Educational Account		4,823,000.00
From Temporary Loans, Building Account...		8,186,000.00
		<u>\$25,034,005.09</u>

Expenditures.

School Tax Fund, Building Account.....	\$ 5,434,734.77	
School Tax Fund, Indebtedness Account.....	375.00	
School Tax Fund, Educational Account.....	9,844,796.13	
School Tax Fund, Income Account.....	2,303,882.47	
Special Funds, Income Account.....	1,324.27	
Jonathan Burr Fund, Income Account.....	3,299.00	
		\$17,588,461.64
Temporary Loans Paid, Building Account....		2,181,000.00
Temporary Loans Paid, Educational Account		4,823,000.00
Cash Balance, June 30, 1914—		
School Tax Fund, Building Account.....	\$ 28,729.27	
School Tax Fund, Indebtedness Account.....	8,978.80	
School Tax Fund, Educational Account.....	264,367.22	
School Fund, Income Account.....	135,938.38	
Special Funds, Income Account.....	2,884.11	
Jonathan Burr Fund, Income Account.....	645.67	
		\$ 441,543.45
		<u>\$25,034,005.09</u>

JONATHAN BURR FUND PRINCIPAL ACCOUNT.

Amount of fund.....		\$33,000.00
Invested as follows:		
15 City of Chicago 3½% Municipal Bonds.....	\$15,000.00	
6 City of Chicago 4% General Corporate.....	6,000.00	
2 Sanitary District 4%	1,000.00	
7 City of Chicago 4% Permanent Improvements.....	7,000.00	
Cash in hands of City Treasurer, June 30, 1914.....	4,000.00	
		<u>\$33,000.00</u>

SWIMMING POOL—CARTER H. HARRISON TECHNICAL HIGH SCHOOL.
Marshall and W. Twenty-fourth Boulevards, Chicago.

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EXPENDITURES BY SCHOOLS—

BUREAU OF AUDIT—1914.

Line No.	NAME OF SCHOOL	INSTRUCTION			OPERATION
		Teachers' Salaries	Educational Supplies	Total Instruction	Engineers' and Janitors' Salaries
1	Chicago Normal College.....	\$ 99,252.50	\$ 6,642.65	\$ 105,895.15	\$ 9,943.99
2	Extra Salaries, Practice Schools.....	19,160.00	.....	19,160.00	.....
3	Normal Extension	6,880.50	.....	6,880.50	.....
4	Chicago Normal School, Total.....	\$ 125,293.00	\$ 6,642.65	\$ 131,935.65	\$ 9,943.99
HIGH SCHOOLS.					
5	Austin	\$ 68,082.45	\$ 1,781.14	\$ 69,863.59	\$ 4,728.14
6	Bowen	52,468.75	3,844.81	56,313.56	10,092.50
7	Calumet	37,039.82	1,301.78	38,341.60	2,609.72
8	Crane	119,425.20	5,604.80	125,030.00	11,320.41
9	Curtis	35,125.20	1,322.11	36,447.31	2,490.87
10	Englewood	111,915.20	2,454.31	114,369.51	7,612.36
11	Flower	21,279.70	2,444.07	23,723.77	3,261.25
12	Harrison (b).....	35,129.80	8,386.48	43,516.28	2,161.63
13	Hyde Park	122,739.95	18,558.50	141,298.45	12,191.82
14	Lake	59,681.80	2,303.10	61,984.90	8,965.76
15	Lake View	71,661.96	1,557.44	73,219.40	5,678.06
16	Lane	116,557.01	10,742.57	127,299.58	13,133.78
17	Marshall	73,760.80	2,529.29	76,290.09	6,027.88
18	McKinley	60,468.70	1,114.68	61,583.38	6,332.40
19	Medill	52,438.60	1,607.83	54,046.43	3,832.47
19a	Morgan Park (c).....	2,490.50	8.46	2,498.96	160.00
20	Parker	43,555.31	2,418.84	45,974.15	1,672.88
21	Phillips	112,833.80	3,207.22	116,041.02	7,773.52
22	Schurz	85,837.20	4,660.57	90,497.77	11,201.56
23	Senn.....	76,997.45	24,722.29	101,719.74	12,416.48
24	Tuley	54,744.33	1,034.35	55,828.68	4,439.49
25	Waller	55,861.25	942.18	56,803.43	4,008.30
26	Apprentices	3,824.90	371.39	4,196.29	.....
27	Special Teachers	101,258.90	.....	101,258.90	.....
28	Total	\$1,574,678.58	\$ 102,968.21	\$1,677,646.79	\$ 142,181.30
29	Parental	\$ 33,965.19	\$ 28,195.60	\$ 62,160.79	\$ 22,614.39
30	Worthy	15,849.33	1,257.19	17,106.52	5,978.26

JULY 1, 1913, TO JUNE 30, 1914.

OPERATION					MAINTENANCE		Line No.
Fuel	Light and Power	School House Supplies	Engineers' and Janitors' Overtime	Total Operation	Total General Repairs and Renewals	Grand Total	
\$ 6,892.07	\$ 1,241.53	\$ 440.28	\$ 580.17	\$ 19,098.04	\$ 2,090.34	\$ 127,063.53	1
						19,100.00	2
						6,890.50	3
\$ 6,892.07	\$ 1,241.53	\$ 440.28	\$ 580.17	\$ 19,098.04	\$ 2,090.34	\$ 153,124.03	4
\$ 1,465.83	\$ 908.10	\$ 292.32	\$ 255.00	\$ 7,548.89	\$ 2,540.85	\$ 79,953.33	5
2,697.55	2,638.13	341.45	49.50	15,819.13	1,974.98	74,107.67	6
632.49	231.37	146.90	75.92	8,696.40	1,643.30	43,681.30	7
2,895.74	240.96	609.10	162.95	15,229.16	3,650.79	143,909.95	8
943.48	285.45	176.24	48.46	3,944.50	1,334.67	41,726.48	9
2,510.73	1,152.30	530.08	227.55	12,082.97	4,512.74	130,915.22	10
1,166.65	270.65	137.69		4,826.24	1,337.27	29,887.28	11
4,925.48	668.96	532.89	58.55	8,347.01	*1,055.33	62,918.62	12
4,602.81	2,815.30	553.27	381.00	20,544.20	6,049.83	167,892.48	13
3,150.32	7.41	431.13	232.73	12,807.35	2,968.37	77,700.62	14
2,212.27	1,437.95	250.47	187.00	9,765.77	2,278.22	85,263.39	15
3,132.77	140.64	916.49	238.60	17,562.28	4,580.49	149,442.35	16
1,867.48	486.21	213.83	296.70	8,892.10	5,067.86	90,250.05	17
2,047.73	497.90	256.07	163.50	9,347.60	1,766.94	72,697.92	18
846.26	162.88	252.83	102.19	5,196.63	3,439.67	62,682.73	19
		6.03		166.03	1.52	2,006.51	19a
1,030.05	88.64	54.77	31.50	2,877.84	368.07	49,220.06	20
1,572.86	1,339.45	350.73	229.50	11,266.06	3,779.00	131,066.08	21
2,709.12	3,436.29	400.88	347.00	18,094.35	3,065.82	111,157.94	22
5,030.99	2,965.83	941.14	131.62	21,486.06	6,122.88	129,328.68	23
986.83	258.62	192.78	68.25	5,945.47	852.61	62,626.76	24
1,160.98	326.15	225.00	46.49	5,766.87	3,631.88	66,202.18	25
						4,196.29	26
						101,258.80	27
\$ 47,377.37	\$ 20,259.19	\$ 7,811.04	\$ 3,334.01	\$ 221,162.91	\$ 52,023.09	\$1,960,832.79	28
\$ 5,678.26		\$ 1,186.92		\$ 29,479.57	\$ 4,248.64	\$ 95,889.00	29
1,950.75	477.36	184.32		8,500.69	633.89	26,331.10	30

EXPENDITURES BY SCHOOLS—

BUREAU OF AUDIT—1914.

Line No.	NAME OF SCHOOL	INSTRUCTION			OPERATION
		Teachers' Salaries	Educational Supplies	Total Instruction	Engineers' and Janitors' Salaries
ELEMENTARY SCHOOLS.					
31	Adams...	\$ 33,441.68	\$ 991.21	\$ 34,432.89	\$ 4,008.01
32	Agassiz ..	32,227.00	1,059.78	33,286.78	3,285.58
33	Albany Avenue (f).....	14,060.72	538.11	14,598.83	*214.31
34	Alcott ..	28,973.70	619.41	29,593.11	3,164.02
35	Altgeld ..	36,719.15	916.98	37,636.13	3,798.06
36	Andersen ..	37,849.01	1,196.97	39,045.98	3,565.44
37	Armour ..	25,881.68	767.71	26,649.39	3,853.51
38	Armstrong ..	19,507.37	758.47	20,265.84	3,371.04
39	Arnold.....	28,915.14	659.22	29,574.36	3,077.75
40	Auburn Park.....	6,691.00	373.61	7,064.61	869.90
41	Audubon ..	32,191.80	852.69	33,044.49	4,147.62
42	Avondale ..	38,732.21	1,124.17	39,856.38	4,555.32
43	Bancroft ..	24,161.95	633.88	24,815.83	2,685.31
44	Barnard ..	20,160.89	594.44	20,755.33	3,145.11
45	Bass ..	28,842.06	710.70	29,552.81	2,811.77
46	Beale ..	37,788.87	1,132.98	38,921.85	3,928.63
47	Beaubien.....	25,810.88	626.03	26,436.91	4,213.51
48	Beldler ..	20,945.26	419.41	21,364.67	2,213.24
49	Belding ..	26,818.01	550.46	27,368.47	3,675.67
50	Bismarck ..	26,233.00	898.47	27,131.47	2,961.21
51	Blaine ..	37,907.10	889.04	38,796.14	4,130.28
52	Bradwell ..	26,007.41	887.84	26,895.25	3,404.78
53	Brainard ..	18,247.68	446.92	18,694.60	2,219.50
54	Brenan ..	10,490.00	311.06	10,801.06	2,188.62
55	Brentano ..	37,402.98	1,102.66	38,505.64	4,576.89
56	Brown ..	29,706.98	875.30	30,582.28	2,543.94
57	Brownell ..	15,407.04	571.63	15,978.67	2,080.33
58	Bryant ..	41,858.55	1,589.38	43,447.93	5,081.74
59	Bryn Mawr.....	10,658.12	615.22	11,273.34	2,329.68
60	Burke ..	30,263.75	668.20	30,931.95	4,399.94
61	Burley ..	22,107.19	712.32	22,819.51	2,937.74
62	Burns ..	39,589.94	1,037.36	40,627.30	4,316.42
63	Burnside ..	23,643.02	962.05	24,605.07	3,542.77
64	Burr ..	48,196.30	2,017.70	50,214.00	6,100.30
65	Burroughs ..	14,815.91	536.56	15,352.47	2,638.89
66	Byford ..	24,079.75	696.13	24,775.88	3,339.40
67	Calhoun ..	27,441.29	695.36	28,136.65	3,510.47
68	Cameron ..	32,343.00	1,021.33	33,364.33	3,332.53
69	Carpenter ..	31,912.68	702.95	32,615.63	3,645.22
70	Carter Practice ..	37,132.50	1,590.95	38,723.45	5,682.30
71	Chalmers.....	32,819.34	852.29	33,671.63	2,967.68
72	Chase ..	23,228.95	841.18	24,070.13	2,715.81
73	Chicago Lawn ..	19,752.90	510.56	20,263.46	2,815.80
74	Clarke ..	44,953.86	2,234.68	47,188.54	6,012.80
75	Clay ..	10,699.25	336.03	11,035.28	1,392.39
76	Cleveland ..	36,754.30	1,045.25	37,799.55	4,784.14
77	Colman ..	18,563.58	783.47	19,347.05	2,288.98
78	Columbus ..	34,436.13	1,094.47	35,530.60	4,400.85
79	Coonley ..	34,950.60	838.17	35,788.77	3,483.04
80	Cooper.....	24,345.67	844.02	25,189.69	3,292.66
81	Copernicus ..	37,449.50	1,663.67	39,113.17	3,842.71
82	Corkery ..	36,929.87	1,051.16	37,981.03	3,765.58
83	Cornell ..	32,070.38	837.19	32,907.57	4,437.07
84	Crerar ..	21,862.00	729.49	22,591.49	2,684.16
85	Curtis ..	22,680.62	868.75	23,549.37	2,490.88

COMMITTEE ON FINANCE.

JULY 1, 1913, TO JUNE 30, 1914—Continued.

OPERATION					MAINTENANCE
Fuel	Light and Power	School House Supplies	Engineers' and Janitors' Overtime	Total Operation	Total General Repairs and Renewals
1,000.00	125.00	547.82	17.33	5,804.30	1,303.50
1,125.56	408.44	120.35	120.00	6,555.12	1,094.78
1,230.64		43.13		267.94	488.11
1,285.19	68.30	145.82	3.25	4,440.04	1,799.71
1,285.08	76.93	171.64	21.00	5,208.18	1,391.32
1,278.02	191.35	259.02	8.00	5,850.08	8,744.17
210.88	67.80	411.06	1.25	5,629.71	1,721.16
779.15	463.35	188.65	77.25	5,300.26	2,617.88
1,287.04	115.82	123.82	6.00	4,600.51	970.15
885.15	77.12	54.97	25.31	1,238.13	451.67
1,000.00	188.38	409.82	2.00	5,472.07	1,006.43
1,000.00	27.03	190.24	96.75	6,105.38	886.00
1,000.00	91.61	177.22	32.87	3,833.16	1,143.80
1,000.00	29.98	187.82		4,536.50	934.91
1,000.00	68.07	212.82	9.00	4,107.89	752.37
1,000.00	105.20	272.58		5,772.16	900.00
1,000.00	55.07	206.22	9.00	5,231.47	1,390.04
1,000.00	114.61	98.16		3,015.47	1,054.23
1,000.00	50.45	105.02	43.00	5,145.72	377.43
1,000.00	55.90	141.17	10.67	3,980.29	1,250.35
1,000.00	79.93	206.00	97.88	6,852.76	4,255.11
1,000.00	203.07	187.70	13.00	4,767.11	1,965.85
1,000.00	81.56	174.82		3,485.83	1,675.16
1,000.00	44.32	108.18	1.87	2,994.76	691.67
1,000.00	191.73	200.62	108.50	7,198.75	334.31
1,000.00	97.57	188.12	3.00	3,864.90	2,352.92
1,000.00	125.73	142.84	18.50	2,928.98	498.88
		451.37	19.50	7,184.36	1,477.25
		141.21	10.87	4,453.52	903.90
		234.08	43.50	6,344.13	1,120.73
		30.46	42.00	3,630.15	596.42
		228.84	24.75	6,008.83	674.55
		231.76	48.00	6,284.24	2,720.11
		717.63	1,104.75	10,804.97	2,649.23
		140.60	13.00	3,911.44	963.43
		122.38	189.00	5,048.14	537.90
		104.37	12.75	4,768.58	667.00
		165.20	12.87	4,908.33	1,262.21
		202.79	11.25	5,186.95	1,059.13
		382.30	13.00	5,337.49	1,545.39
		129.29	3.00	3,962.23	1,392.92
		143.51	24.00	3,730.40	667.74
		301.08	15.00	4,201.67	1,061.40
		403.74	22.45	3,770.33	2,564.27
		59.87		1,980.95	1,000.20
		239.09	69.50	6,822.53	3,390.00
		211.13		3,608.73	3,533.74
		687.75	142.25	6,772.37	4,606.84
		215.58	39.00	4,954.54	572.33
		119.67	11.98	4,442.14	741.51
		303.11	34.00	5,579.42	938.35
		434.73	388.50	6,918.58	2,394.29
		360.39	17.75	6,288.97	679.33
		102.60	4.25	3,730.08	1,028.55
		179.23	48.47	3,944.52	907.34

EXPENDITURES BY SCHOOLS—

BUREAU OF AUDIT—1914.

Line No.	NAME OF SCHOOL	INSTRUCTION			OPERATION
		Teachers' Salaries	Educational Supplies	Total Instruction	Engineers' and Janitors' Salaries
86	Dante.....	39,113.79	1,538.50	40,652.29	6,258.41
87	Darwin ..	31,341.63	1,075.02	32,416.65	3,385.06
88	Davis ..	14,894.59	785.43	15,680.02	3,292.95
89	Delano.....	18,295.76	1,153.13	19,448.89	3,316.17
90	Detention Home ..	7,170.49	320.85	7,491.34	907.50
91	Dewey ..	25,897.89	577.88	26,475.77	3,197.64
92	Doolittle ..	29,760.31	1,021.38	30,781.69	3,465.42
93	Dore ..	26,821.72	979.22	27,800.94	3,774.90
94	Douglas ..	26,793.11	745.47	27,538.58	3,925.40
95	Drake ..	27,234.43	806.69	28,041.12	3,899.59
96	Drummond ..	24,189.38	792.62	24,982.00	3,337.68
97	Dunning ..	12,399.50	495.76	12,895.26	1,919.91
98	Earle ..	29,712.53	749.44	30,461.97	3,449.91
99	Emerson ..	13,846.34	524.65	14,370.99	1,827.68
100	Emmet ..	18,824.26	500.24	19,324.50	3,641.76
101	Ericsson ..	23,838.77	720.00	24,558.77	2,763.70
102	Everett ..	23,409.25	584.62	23,993.87	2,677.23
103	Fallon.....	20,024.88	819.55	20,844.43	3,312.27
103a	Fallon Crippled Children (g).....	2,344.75	3,471.24	5,815.99	1,001.12
104	Farragut ..	38,241.31	940.37	39,181.68	3,564.67
105	Farren.....	24,203.69	997.37	25,201.06	3,568.96
106	Felsenthal ..	27,495.26	693.38	28,188.64	3,168.43
107	Field ..	22,451.75	1,044.93	23,496.68	3,232.85
108	Fiske ..	31,687.14	746.56	32,433.70	3,700.73
109	Forestville.....	32,735.02	833.15	33,568.17	3,302.94
110	Foster ..	47,069.37	1,331.60	48,420.97	5,784.28
111	Franklin ..	40,235.76	1,595.87	41,831.63	4,709.44
112	Froebel.....	22,701.59	756.00	23,457.59	2,940.24
113	Fuller ..	14,045.44	533.91	14,579.35	2,181.17
114	Fulton ..	35,005.01	1,023.46	36,028.47	4,278.18
115	Gage Park ..	12,826.01	594.56	13,420.57	1,914.33
116	Gallistel.....	32,968.89	1,295.39	34,264.28	5,025.92
117	Garfield ..	40,115.32	1,359.44	41,474.76	5,659.32
118	Gary ..	37,032.90	1,086.51	38,119.41	5,524.39
119	Gladstone.....	39,914.46	1,611.48	41,525.94	4,719.44
120	Goethe ..	29,811.26	950.40	30,761.66	3,139.69
121	Goodrich ..	30,896.45	1,335.83	32,232.28	4,025.39
122	Goudy ..	18,959.52	747.49	19,707.01	2,927.45
123	Graham ..	31,458.19	1,426.29	32,884.48	4,419.99
124	Grant ..	17,226.87	563.10	17,789.97	2,601.34
125	Gray ..	26,842.92	937.45	27,780.37	4,375.55
126	Greeley ..	28,967.52	742.86	29,710.38	2,673.39
127	Greene ..	21,955.25	907.84	22,863.09	2,807.89
128	Gresham.....	21,760.12	551.96	22,312.08	3,495.42
129	Haines Practice ..	42,047.92	1,834.04	43,881.96	4,702.57
130	Hamilton ..	33,238.89	1,217.23	34,456.12	3,579.39
131	Hamline ..	26,479.01	819.33	27,298.34	3,827.13
132	Hammond ..	28,240.43	979.60	29,220.03	4,548.68
133	Hancock ..	11,055.62	708.86	11,764.48	1,602.21
134	Hansen Park, Mont Clare.....	13,585.82	399.74	13,985.56	1,690.07
135	Harper.....	37,754.98	976.82	38,731.80	5,349.13
136	Harvard ..	19,186.19	569.35	19,755.54	2,701.19
137	Haugen.....	21,921.49	762.01	22,683.50	3,351.32
138	Haven ..	18,030.96	616.71	18,647.67	3,113.19
139	Hawthorne ..	25,337.80	714.27	26,052.07	3,412.91
140	Hayes.....	16,908.35	540.47	17,448.82	2,175.79

JULY 1, 1913, TO JUNE 30, 1914—Continued.

OPERATION					MAINTENANCE		
Fuel	Light and Power	School House Supplies	Engineers' and Janitors' Overtime	Total Operation	Total General Repairs and Renewals	Grand Total	Line No.
1,754.67	544.16	456.46	36.25	9,049.96	905.21	50,607.45	86
966.40	171.81	225.30	136.25	4,884.84	744.97	38,046.46	87
850.87	47.92	333.15	36.00	4,560.89	904.19	21,145.10	88
1,611.85	277.75	193.71	96.00	5,495.48	805.28	25,839.65	89
40.43	9.89	30.63	.....	988.39	52.95	8,532.68	90
1,230.44	50.53	157.62	12.00	4,648.23	2,695.31	33,819.31	91
1,121.79	140.63	160.97	9.75	4,898.56	805.20	36,485.45	92
923.17	224.24	303.19	7.87	5,233.37	1,270.79	34,305.10	93
1,296.62	91.96	126.10	7.25	5,450.33	3,662.72	35,651.63	94
937.56	66.22	138.40	2.75	4,044.43	859.97	32,945.52	95
842.48	85.66	256.43	41.74	4,563.97	1,112.96	30,653.93	96
541.62	.....	161.87	.....	2,622.90	2,512.28	18,030.44	97
1,240.68	48.75	230.51	25.25	4,995.10	1,181.61	36,638.68	98
706.78	39.83	68.36	7.50	2,650.10	931.76	17,952.85	99
1,000.07	254.91	182.91	104.75	5,184.40	1,186.13	25,695.03	100
974.64	62.07	233.27	6.00	4,039.68	2,306.16	30,904.61	101
803.24	68.14	190.86	22.25	3,761.77	1,688.16	29,443.80	102
861.25	63.84	328.25	18.00	4,533.11	1,414.89	26,842.43	103
78.80	5.76	37.59	.....	1,122.77	128.62	7,067.38	103g
1,035.37	208.80	286.93	69.27	5,160.04	1,553.37	45,895.09	104
958.80	168.66	169.14	4.50	4,920.05	1,822.82	31,443.93	105
893.32	122.15	116.96	4.12	4,304.38	1,081.34	33,574.36	106
1,012.68	51.91	115.56	30.50	4,443.50	1,619.79	29,559.97	107
1,539.45	254.51	205.06	285.00	5,984.80	833.60	39,252.10	108
1,153.31	149.02	217.33	30.00	4,882.60	2,103.37	40,564.14	109
1,092.15	568.99	834.24	89.75	8,320.06	2,457.95	59,193.98	110
1,445.27	415.80	376.47	33.25	6,960.23	3,145.65	51,957.51	111
1,141.84	46.51	100.90	4.50	4,235.99	755.56	28,449.14	112
644.39	206.68	135.93	.....	3,168.17	765.63	18,513.15	113
1,351.96	174.62	344.71	21.00	6,170.47	595.34	42,794.28	114
858.12	8.32	139.35	5.25	2,925.37	2,253.96	18,599.90	115
1,619.67	73.09	445.18	40.25	7,205.01	1,185.68	42,654.97	116
1,367.16	428.86	593.76	43.87	8,092.97	953.30	50,521.03	117
1,724.44	373.20	621.03	48.00	8,290.97	985.69	47,396.07	118
1,450.66	78.13	482.88	13.50	6,744.61	2,045.16	50,315.71	119
764.58	62.91	191.53	13.50	4,162.15	864.40	35,788.21	120
1,794.74	297.23	386.45	1.67	6,505.59	3,736.84	42,474.71	121
1,167.13	43.89	91.25	.....	4,229.73	672.14	24,608.83	122
1,342.50	230.50	471.25	150.00	6,614.15	2,073.51	41,572.14	123
831.95	33.12	190.05	1.25	8,667.71	5,225.32	26,673.00	124
1,058.70	111.25	213.60	30.45	5,789.55	1,721.89	35,291.81	125
1,134.50	145.22	164.58	29.25	4,146.75	557.65	34,414.78	126
801.95	34.52	157.88	15.00	3,816.65	821.87	27,501.61	127
1,053.46	73.14	181.26	.....	4,803.30	723.47	27,838.85	128
1,147.82	331.73	530.46	32.12	6,744.70	5,784.97	56,411.63	129
1,260.47	18.69	274.92	31.62	5,165.00	1,012.44	40,633.56	130
1,098.89	151.00	355.83	17.02	5,450.49	1,078.23	33,827.06	131
1,374.45	160.43	496.85	22.50	6,592.96	2,471.26	38,284.25	132
649.08	1.92	83.12	.....	2,336.33	562.05	14,657.86	133
642.45	.....	87.68	.....	2,390.20	590.71	16,966.47	134
1,479.50	417.54	273.27	59.25	7,578.77	3,703.81	50,014.38	135
983.43	13.36	89.73	.....	3,737.76	135.48	23,628.98	136
1,336.53	195.45	188.35	92.00	5,213.66	856.26	28,753.42	137
875.60	146.29	265.85	18.75	4,419.18	3,500.57	26,567.44	138
1,015.08	65.94	181.58	24.00	4,679.51	339.07	41,070.65	139
840.26	57.32	107.44	.....	3,183.81	483.06	21,205.69	140

EXPENDITURES BY SCHOOLS—

BUREAU OF AUDIT—1914.

Line No.	NAME OF SCHOOL.	INSTRUCTION			OPERATION
		Teachers' Salaries	Educational Supplies	Total Instruction	Engineers' and Janitors' Salaries
141	Hayt ..	33,945.73	773.68	34,719.33	4,516.
142	Headley ..	12,614.98	367.69	12,972.67	1,908.
143	Healy.....	33,681.06	1,190.17	34,821.23	3,791.
144	Hedges ..	32,408.25	1,055.08	33,463.33	4,391.
145	Hendricks ..	19,452.89	951.00	20,403.89	3,008.
146	Henry ..	36,626.88	1,087.46	37,714.33	4,892.
147	Herzl.....	10,725.12	676.25	11,400.37	1,048.
148	Holden.....	40,104.47	1,411.51	41,515.98	5,076.
149	Holmes.....	29,082.16	735.98	29,708.14	3,436.
150	Howe.....	27,323.51	670.61	27,994.12	3,606.
151	Howland.....	43,724.43	1,435.71	45,160.14	4,435.
151a	Irving.....	34,985.46	1,385.37	36,370.83	5,177.
152	Irving Park ..	31,770.16	950.04	32,720.19	3,104.
153	Jackson ..	54,073.14	2,890.98	56,464.07	5,971.
154	Jahn ..	28,145.08	5,983.80	34,078.88	4,234.
155	Jefferson ..	43,717.67	1,196.81	44,914.38	4,533.
156	Jenner ..	32,982.52	1,371.51	34,354.03	4,343.
157	Jirka ..	23,408.75	921.27	24,325.02	3,783.
158	Jones ..	16,333.37	606.01	16,909.38	2,904.
159	Jungman.....	30,786.37	837.37	31,673.94	3,844.
159a	Keeler Avenue.....	12,243.75	358.26	12,602.00	1,320.
160	Keith ..	14,175.13	680.60	14,805.73	2,609.
161	Kenwood ..	17,470.26	536.86	18,007.12	2,554.
162	Kershaw ..	37,469.22	932.10	38,401.32	3,782.
163	Key ..	18,679.33	627.37	19,206.75	2,537.
164	King.....	18,907.84	555.56	19,463.40	2,431.
165	Kinzie.....	14,987.54	471.76	15,459.30	3,713.
166	Knickerbocker ..	18,296.49	476.37	18,772.86	2,634.
167	Kohn ..	26,600.50	900.47	27,700.97	5,761.
168	Komensky ..	33,136.36	824.74	33,961.09	4,209.
169	Kosciuszko ..	25,211.65	591.29	25,802.93	4,354.
170	Kozminski.....	25,776.00	523.09	26,299.09	3,177.
171	La Fayette ..	46,523.12	1,236.16	47,814.27	4,005.
172	Langland ..	20,454.27	644.76	21,099.03	2,903.
173	La Salle ..	22,455.85	359.33	22,815.23	3,096.
174	Lawson.....	50,466.41	876.46	51,342.87	4,104.
175	Lewis-Champlin ..	28,858.96	643.15	29,702.11	4,311.
176	Libby.....	32,486.60	1,080.99	33,567.59	3,491.
177	Lincoln ..	29,083.65	897.56	29,951.21	3,412.
178	Linne ..	24,382.91	602.35	24,985.26	3,176.
179	Lloyd ..	23,008.27	832.67	23,840.94	4,349.
180	Logan ..	24,432.66	777.68	25,210.34	2,498.
181	Longfellow.....	22,638.85	606.09	23,244.94	2,894.
182	Lowell ..	29,442.15	1,020.02	30,462.17	3,291.
183	Madison ..	22,762.17	743.51	23,465.68	3,263.
184	Manierre ..	23,049.00	616.86	23,665.86	2,894.
185	Mann.....	24,367.08	676.13	25,043.21	3,939.
186	Marquette ..	35,524.13	1,680.27	37,204.45	4,219.
187	Marsh ..	14,335.41	524.35	14,800.26	4,034.
188	Marshall ..	17,919.13	334.72	18,303.85	1,506.
189	May ..	15,680.23	421.04	16,101.27	2,739.
189a	Mayfair.....	12,443.25	328.97	12,772.22	1,899.
190	McAllister.....	14,288.62	691.84	14,980.46	3,007.
191	McClellan.....	19,413.51	820.90	20,239.41	3,474.
192	McCormick.....	32,943.88	1,012.77	33,956.65	4,398.
193	McCosh.....	32,667.88	1,639.13	34,307.01	3,098.

COMMITTEE ON FINANCE.

JULY 1, 1913, TO JUNE 30, 1914—Continued.

Total	OPERATION				MAINTENANCE	Gr To
	Light and Power	School House Supplies	Engineers' and Janitors' Overtime	Total Operation	Total General Repairs and Renewals	
1,571.50	115.50	195.34	30.00	6,428.75	965.75	4
535.26	20.26	75.12	.....	2,519.36	508.29	10
1,043.66	206.11	397.67	3.87	5,444.53	1,290.85	4
1,274.71	30.29	404.22	10.24	6,111.20	583.62	4
708.91	220.51	247.28	.....	4,185.20	915.72	2
1,716.20	53.39	236.40	46.59	6,450.35	2,535.76	4
629.05	1.76	354.36	.....	2,033.78	1,011.89	1
1,432.22	153.98	548.14	54.75	7,320.82	2,214.73	5
1,719.02	373.33	321.03	65.62	5,905.70	902.43	3
1,501.20	125.67	132.83	140.87	5,596.99	766.46	3
1,833.84	364.64	262.20	42.00	7,087.92	2,147.75	5
1,735.46	283.76	306.06	95.75	7,613.15	2,817.98	4
1,302.00	159.43	235.43	46.12	4,747.14	1,867.79	3
1,936.90	273.13	656.53	45.00	8,867.95	1,790.23	6
944.02	47.73	323.01	32.25	5,681.47	1,425.62	3
1,579.53	199.37	375.33	12.00	6,700.20	1,074.95	5
1,141.62	223.22	496.64	.....	6,206.72	824.95	4
936.56	9.44	432.21	29.25	5,220.38	1,295.25	3
739.32	173.10	441.32	167.25	4,426.08	1,691.47	2
1,430.52	106.83	449.71	8.25	5,319.67	1,117.46	3
316.33	.....	81.40	.....	1,718.67	642.52	1
620.76	138.80	170.72	1.67	3,561.87	1,081.62	1
929.20	221.94	173.37	12.00	3,896.59	770.78	2
42.42	36.96	133.41	3.00	4,973.38	1,725.13	4
735.74	11.08	35.92	30.75	3,700.86	448.72	2
775.71	64.24	121.53	.....	3,373.05	823.17	2
751.94	194.00	223.10	80.12	4,967.51	932.23	2
691.50	23.57	117.91	.....	3,472.23	651.10	2
1,943.43	83.81	223.52	33.97	8,060.84	2,769.85	3
1,363.51	160.93	269.93	18.36	5,992.26	1,957.88	4
1,133.53	130.72	310.39	6.00	6,040.10	692.73	3
733.34	43.19	159.74	22.30	4,194.51	1,153.21	3
1,370.73	167.27	219.20	6.75	5,769.99	1,140.90	5
1,033.11	99.55	176.12	19.50	4,281.93	806.16	2
1,003.23	109.30	203.37	.75	4,513.75	1,234.54	2
1,645.33	91.56	143.39	.....	5,990.04	1,435.63	5
1,672.93	33.22	91.49	23.93	6,133.04	1,353.13	3
2,553.00	236.94	183.30	9.75	5,430.27	1,323.03	4
1,172.92	73.23	197.53	.....	4,361.25	1,170.85	3
923.35	13.53	211.03	103.75	4,433.64	1,159.30	3
1,500.30	52.43	233.33	70.25	6,235.63	1,064.59	3
730.45	45.23	93.29	.....	3,423.01	730.67	2
1,001.22	75.41	234.93	.....	4,135.66	494.66	2
2,073.39	110.56	230.30	10.25	5,717.24	333.33	3
1,103.94	73.00	193.37	22.25	4,063.91	1,115.63	2
1,045.29	75.22	200.61	3.50	4,243.77	936.33	2
1,551.51	111.62	160.02	9.00	5,763.03	925.21	3
1,423.53	245.77	297.93	76.36	6,236.53	1,543.64	4
927.05	100.32	292.39	74.25	5,419.61	1,553.23	2
430.12	119.62	63.46	74.17	2,214.34	973.02	2
313.33	104.32	120.26	55.50	3,337.63	462.82	2
234.24	13.33	107.67	20.00	2,239.33	493.67	1
1,020.33	104.60	234.00	11.62	4,427.67	306.15	2
1,032.66	213.72	409.03	6.00	5,170.67	1,931.51	2
1,343.09	77.41	331.54	32.00	6,233.61	311.29	4
1,053.42	60.77	245.75	6.94	4,429.30	1,525.07	4

EXPENDITURES BY SCHOOLS—

BUREAU OF AUDIT—1914.

Line No.	NAME OF SCHOOL	INSTRUCTION			OPERATION
		Teachers' Salaries	Educational Supplies	Total Instruction	Engineers' and Janitors' Salaries
194	McLaren	40,864.00	1,047.19	41,911.19	4,908.27
195	McPherson.....	29,808.94	902.09	30,801.03	3,233.88
196	Medill	23,547.14	699.80	24,246.94	2,295.28
197	Mitchell	42,132.11	1,032.85	43,164.96	4,135.43
198	Monroe	35,034.51	1,246.49	36,281.00	3,673.10
199	Montefiore	23,058.13	627.77	23,685.90	3,385.93
200	Moos	27,956.61	941.41	28,898.02	3,910.04
200c	Morgan Park Elementary.....	2,821.75	8.14	2,829.89	282.00
201	Morris	23,762.00	611.97	24,373.97	2,805.36
202	Morse	25,446.94	733.78	26,180.72	3,550.00
203	Mosely	20,612.83	642.21	21,255.04	3,038.34
204	Motley	25,548.24	733.04	26,281.28	3,042.75
205	Mozart	25,256.25	720.07	25,976.32	3,380.64
206	Mulligan	24,789.57	744.81	25,534.38	2,590.39
207	Nash	34,883.05	901.62	35,784.67	3,611.64
208	Nettelhorst.....	29,187.53	636.53	29,824.06	3,633.06
209	Newberry	29,549.73	1,330.62	30,880.35	3,204.42
210	Nixon	35,978.54	1,248.77	37,227.31	4,535.90
211	Nobel	28,565.45	996.94	29,562.39	4,680.85
212	Norwood Park	10,944.39	496.83	11,441.26	1,849.96
213	Oakland	17,064.74	616.60	17,681.34	2,689.98
214	Ogden	19,192.11	414.75	19,606.86	2,657.62
215	Oglesby	22,402.63	896.86	23,299.49	3,192.70
216	Otis.....	31,254.83	1,062.68	32,337.51	5,118.12
217	Parker Practice	40,292.05	1,254.94	41,546.99	3,908.40
218	Parkman	23,999.04	800.17	24,799.21	3,219.76
219	Park Manor	22,811.66	910.98	23,723.64	3,010.11
220	Parkside	16,206.88	408.15	16,614.03	2,125.90
221	Peabody	17,584.01	543.22	18,127.23	2,416.62
222	Penn	39,105.57	866.77	39,972.34	3,806.64
223	Pickard	32,879.50	648.89	33,528.39	3,612.23
224	Plamondon	17,171.45	463.52	17,634.97	2,172.29
225	Poe	10,293.75	339.11	10,632.86	2,276.43
226	Prescott	24,944.33	610.69	25,555.02	3,851.46
227	Pulaski.....	20,643.32	716.86	21,360.18	2,386.24
228	Pullman.....	26,482.08	647.12	27,129.20	4,873.04
229	Raster	32,113.48	1,011.42	33,124.90	5,452.21
230	Ravenswood	27,926.59	837.91	28,764.50	3,374.52
231	Ray	27,929.56	972.84	28,902.40	3,606.73
232	Raymond	21,430.82	875.75	22,306.57	2,775.36
233	Revere	16,241.28	507.43	16,748.71	2,517.84
234	Rogers	38,399.87	1,182.71	39,582.58	5,337.46
235	Ryder	11,060.04	954.98	12,014.97	2,273.72
236	Ryerson	29,729.13	786.21	30,515.34	3,190.56
237	Sawyer Avenue	14,638.61	359.74	14,998.35	2,195.98
238	Scammon	13,356.88	392.46	13,739.34	2,113.97
239	Scanlan.....	28,932.08	1,076.84	30,008.92	3,264.30
240	Schiller.....	28,809.05	848.89	29,657.94	3,590.19
241	Schley	34,920.46	1,182.38	36,102.84	3,506.51
242	Schneider	24,944.23	662.86	25,606.59	2,949.91
243	Scott	21,241.75	624.44	21,866.19	2,497.63
244	Seward	26,360.38	1,147.57	27,507.95	3,867.10
245	Sexton	17,891.88	708.05	18,599.93	2,715.96
246	Shakespeare	21,850.66	535.53	22,386.19	2,704.20
247	Sheldon.....	17,350.84	393.68	17,744.52	1,935.43
248	Sheridan, Mark	28,544.83	687.50	29,232.33	4,082.41

JULY 1, 1913, TO JUNE 30, 1914 -Continued.

OPERATION				MAINTENANCE			Line No.
Fuel	Light and Power	School House Supplies	Engineers and Janitors' Overtime	Total Operation	Total General Repairs and Renewals	Grand Total	
1,853.84	146.85	305.11	65.87	7,363.94	4,874.33	53,649.46	194
1,094.61	22.09	96.33	4.50	4,501.40	735.74	36,038.17	195
495.75	97.72	143.90	61.31	3,093.96	861.13	27,702.03	196
1,403.90	105.69	150.94	18.00	5,814.16	225.82	49,204.94	197
1,138.68	32.62	274.81	21.00	5,139.71	921.26	42,341.97	198
969.47	175.10	510.94	29.25	5,090.68	2,184.20	30,910.78	199
1,076.86	366.00	185.04	102.04	5,629.98	823.68	35,351.68	200
.....	.....	6.67	.....	288.67	.....	8,118.56	200c
967.83	82.82	106.54	6.00	4,078.55	572.31	29,024.83	201
1,169.69	125.96	210.72	71.75	5,128.02	867.82	32,176.56	202
939.30	32.94	266.83	.94	4,298.35	742.76	26,296.15	203
870.76	210.57	149.86	8.00	4,281.97	822.95	31,386.20	204
1,376.81	203.13	183.43	130.25	5,274.26	1,568.31	32,818.89	205
968.17	96.84	136.34	1.25	3,812.99	590.13	29,937.50	206
985.22	28.35	182.00	37.50	4,844.71	1,372.50	42,001.88	207
1,469.27	121.39	166.67	92.25	5,482.63	2,240.64	37,556.33	208
1,151.57	167.59	157.74	19.50	4,700.82	1,006.39	36,587.54	209
967.93	31.23	141.86	330.59	6,007.53	1,230.01	44,464.85	210
1,601.16	226.26	302.04	40.49	6,850.80	1,508.73	37,921.92	211
682.52	.....	91.37	2.50	2,626.35	720.18	14,787.79	212
742.73	44.55	113.16	12.00	3,582.40	732.74	21,996.46	213
961.19	189.23	131.18	15.00	3,954.22	1,220.20	24,781.28	214
1,315.84	66.32	264.03	12.00	4,850.89	655.26	28,805.64	215
1,950.62	245.29	450.94	36.59	7,801.56	2,527.93	42,667.00	216
2,406.46	206.81	127.81	64.74	6,706.22	871.50	49,124.71	217
1,325.17	243.22	198.08	7.66	4,993.84	2,465.16	32,258.21	218
2,354.93	53.60	298.06	4.50	5,721.20	1,618.73	31,363.57	219
417.54	57.51	84.26	19.25	2,704.46	637.07	19,955.56	220
668.14	128.02	132.55	.....	3,344.73	1,016.11	22,498.07	221
1,250.17	76.92	169.06	26.02	5,328.40	663.03	45,963.77	222
1,025.50	40.86	166.84	6.37	4,851.29	1,426.14	40,005.82	223
699.70	17.27	143.92	28.50	3,062.68	462.19	21,150.84	224
650.28	7.04	171.59	4.25	3,109.64	408.34	14,145.84	225
1,203.13	77.67	348.92	57.00	5,538.18	918.89	32,012.09	226
909.71	68.78	110.46	.....	3,495.19	644.23	25,499.60	227
1,644.76	124.89	326.14	4.50	6,973.33	938.53	35,041.06	228
1,714.58	268.89	474.28	8.25	7,917.71	2,467.13	43,509.74	229
1,370.36	34.26	222.81	126.00	5,127.95	1,818.44	35,210.89	230
1,215.71	206.56	274.75	18.00	5,881.75	2,347.50	36,631.65	231
896.36	72.74	154.59	22.45	3,921.50	1,168.69	27,396.76	232
872.64	33.66	238.97	11.00	3,674.11	453.95	20,876.77	233
1,323.88	52.77	398.52	22.87	7,135.50	370.96	47,089.04	234
716.57	81.09	110.52	71.25	3,253.15	520.75	16,788.87	235
979.26	496.15	197.62	22.25	4,875.84	840.35	36,231.53	236
766.27	.07	83.81	.....	3,046.08	490.04	18,534.47	237
510.08	201.58	144.76	4.50	2,974.84	806.56	17,520.74	238
992.15	87.86	243.40	57.50	4,644.61	909.75	35,563.28	239
1,049.93	144.32	477.14	2.62	5,264.20	1,103.35	36,025.49	240
817.85	84.97	164.88	32.25	4,606.46	1,504.79	42,214.09	241
941.64	36.85	176.05	12.00	4,116.45	1,612.89	31,335.93	242
791.58	40.45	170.33	.....	3,499.99	467.11	25,833.29	243
1,435.87	129.66	333.18	24.74	5,790.05	2,828.67	36,126.67	244
777.17	103.04	230.65	3.00	3,829.12	485.96	22,910.01	245
1,293.43	134.45	151.69	27.00	4,310.77	620.13	27,317.09	246
525.76	22.12	105.54	6.00	2,594.84	857.06	15,196.44	247
1,290.69	111.85	572.91	11.24	6,018.59	1,487.26	36,933.18	248

EXPENDITURES BY SCHOOLS—

BUREAU OF AUDIT—1914.

Line No.	NAME OF SCHOOL	INSTRUCTION			OPERATION
		Teachers' Salaries	Educational Supplies	Total Instruction	Engineers' and Janitors' Salaries
249	Sheridan, Phil.	34,648.13	928.70	35,571.83	5,842.47
250	Sherman ..	26,648.04	638.90	27,286.94	2,611.20
251	Sherwood ..	26,154.55	1,014.86	27,169.41	3,318.82
252	Shields.....	25,833.35	956.06	26,789.41	4,682.71
253	S inner ..	24,135.62	837.58	24,973.05	2,375.76
254	Smyth .. !.....	40,228.25	1,080.29	41,308.54	5,045.46
255	South Deering	9,075.50	404.27	9,479.77	1,235.64
256	Spaulding (g).....	10,589.50	12,829.07	23,418.57	3,184.55
257	Spencer ..	17,351.35	727.87	18,079.22	2,345.24
258	Springfield Avenue.....	6,896.51	236.19	7,132.70	902.76
258a	Spry.....	35,681.51	1,069.00	36,750.51	3,612.72
259	Stewart ..	38,876.11	1,035.75	39,911.86	3,773.02
260	Stowe ..	26,876.88	1,022.61	27,899.49	3,268.92
261	Sullivan ..	22,161.69	721.13	22,882.87	3,200.26
262	Sumner ..	31,973.31	779.18	32,752.49	4,250.08
263	Swift (k).....	7,650.08	535.56	8,185.69	1,064.46
263a	Swing.....	21,728.12	730.78	22,458.90	3,023.35
264	Talcott ..	35,782.08	1,088.45	36,870.47	4,712.28
265	Taylor ..	18,122.00	479.88	18,601.88	1,774.45
266	Tennyson ..	18,605.80	529.50	19,135.30	2,669.98
267	Thomas.....	13,291.82	298.56	13,584.98	2,162.88
268	Thorpe, J. N.	20,602.56	945.44	21,548.00	2,689.68
269	Thorpe, Ole A.	20,342.63	896.85	21,239.48	4,751.77
270	Throop ..	19,702.88	471.90	20,174.78	2,286.14
271	Tilden ..	19,100.24	598.11	19,698.35	3,496.98
272	Tilton ..	26,575.64	665.57	27,241.21	4,064.34
273	Trumbull.....	40,970.66	1,202.14	42,172.80	5,057.15
273a	University Avenue.....	12,401.23	602.42	13,003.70	1,736.30
274	Vanderpoel.....	10,432.07	559.82	10,991.89	2,732.82
275	Van Vliissingen.....	34,378.65	1,166.75	35,545.40	4,086.64
276	Von Humboldt.....	52,559.86	2,044.66	54,604.52	4,939.85
277	Wadsworth ..	26,192.56	827.17	27,019.72	2,874.24
278	Walsh ..	27,556.24	1,298.62	28,849.86	4,152.48
279	Ward.....	25,092.56	608.05	25,700.61	3,024.58
280	Warren ..	14,419.10	482.13	14,901.23	3,705.97
281	Washburne.....	39,792.67	1,053.66	40,846.23	5,463.55
282	Washington.....	31,453.72	1,372.66	32,826.28	4,310.22
283	Waters ..	23,427.18	1,104.36	24,531.48	3,897.24
284	Webster ..	18,645.90	655.20	19,301.10	2,275.54
285	Wells ..	30,509.58	987.70	31,497.23	3,527.14
286	Wentworth.....	38,497.39	645.43	39,142.83	3,686.05
287	West Pullman	28,340.01	1,099.43	29,439.44	3,317.13
287a	West 62nd Place.....	8,922.88	202.11	9,124.99	1,819.14
288	Whitney ..	30,055.73	1,101.89	31,157.61	4,123.59
289	Whittier ..	23,875.80	540.16	24,415.96	2,646.06
290	Wicker Park	38,013.39	1,041.64	39,055.03	3,506.04
291	Willard ..	34,159.01	969.45	35,098.46	3,356.39
292	Yale ..	27,125.64	799.68	27,925.32	3,152.46
293	Yates ..	28,174.69	924.43	29,099.12	3,249.01
293a	Prevocational.....	13,345.70	449.45	13,795.15	.....
294	Total Elementary Schools.....	\$7,137,888.16	\$ 245,696.66	\$7,383,579.72	\$ 619,712.08

JULY 1, 1913, TO JUNE 30, 1914—Concluded.

OPERATION					MAINTENANCE	Grand Total	Line No.
Fuel	Light and Power	School House Supplies	Engineers' and Janitors' Overtime	Total Operation	Total General Repairs and Renewals		
2,023.40	182.53	529.54	12.75	8,505.78	1,574.53	45,743.14	249
760.47	176.62	151.11	3.00	8,702.30	1,379.16	32,303.40	250
745.35	94.64	140.64	80.92	4,380.37	1,097.46	32,647.24	251
1,110.88	89.88	355.93	31.49	6,270.84	431.12	32,906.37	252
646.70	113.47	119.87	4.50	3,260.30	1,751.21	29,934.56	253
1,185.11	318.18	517.06	251.31	7,317.12	1,491.37	50,002.08	254
889.88	36.16	189.80	2.50	2,353.98	653.27	12,486.02	255
885.95	234.17	106.36	.....	4,411.08	532.40	28,303.00	256
506.29	44.56	145.17	24.00	3,125.26	742.14	21,946.62	257
179.39	.....	62.52	.....	1,144.67	734.41	9,011.78	258
1,166.59	136.53	183.03	14.25	5,113.17	1,580.39	43,444.07	258a
1,253.11	72.90	202.61	117.75	5,419.39	1,628.32	46,959.57	259
981.87	70.00	259.65	9.00	4,579.44	509.25	32,933.18	260
733.97	87.11	182.23	1.25	4,218.82	610.75	27,712.44	261
1,322.85	188.77	280.96	78.50	6,121.16	3,674.86	42,546.51	262
1,423.89	46.08	284.62	.....	2,819.05	369.94	11,374.53	263
576.16	107.74	229.85	13.75	3,955.85	982.50	27,397.25	263a
1,355.82	94.87	460.33	7.25	6,631.55	2,293.91	45,745.98	264
448.86	43.58	123.16	7.50	2,402.55	520.10	21,524.53	265
867.65	21.13	128.81	1.25	3,688.87	567.30	23,391.47	266
649.57	29.62	129.08	4.25	2,976.00	601.68	17,162.51	267
1,067.19	79.90	118.53	8.22	3,963.52	736.01	26,247.53	268
1,012.13	6.32	274.83	9.00	6,054.00	1,774.16	29,067.64	269
642.90	50.73	114.57	7.50	3,051.88	842.58	24,069.19	270
885.46	160.34	278.40	16.25	4,837.43	492.88	25,023.66	271
1,333.03	150.62	145.41	173.25	5,886.60	1,302.73	34,510.69	272
1,401.16	109.32	199.15	123.00	6,899.78	1,277.31	50,349.89	273
512.93	.....	125.49	.....	2,374.75	1,676.80	17,055.25	273a
1,051.67	13.45	134.53	26.62	3,959.09	503.04	15,469.02	274
1,419.09	103.62	430.92	11.75	5,998.92	784.20	42,343.92	275
1,536.49	350.06	335.75	24.50	7,136.62	2,459.37	64,245.01	276
936.64	58.84	178.44	22.50	4,120.66	1,690.97	32,361.35	277
926.93	203.22	434.16	57.75	5,774.54	1,147.31	35,771.71	278
735.82	26.06	141.13	.....	3,977.56	2,281.88	31,960.05	279
1,012.79	74.43	304.96	10.50	5,109.67	1,123.26	31,084.16	280
1,473.68	123.55	431.02	16.50	7,516.30	1,009.01	49,331.54	281
1,245.81	235.30	493.53	34.99	6,319.85	1,021.19	40,167.32	282
1,335.86	3.15	355.45	80.37	5,662.07	1,974.35	32,168.10	283
609.75	73.49	105.73	.....	3,064.51	606.26	23,171.87	284
1,323.50	245.25	237.57	37.25	5,375.71	1,333.29	33,395.23	285
924.23	155.40	184.90	12.00	4,912.58	1,173.80	45,223.21	286
1,104.94	10.19	164.02	236.25	4,732.52	3,025.04	37,197.00	287
233.31	.....	123.53	13.50	2,194.48	1,034.75	12,404.22	287a
1,137.36	46.06	240.09	12.75	5,559.85	464.33	37,131.34	288
795.77	64.32	153.05	3.75	3,662.95	621.63	23,700.79	289
1,160.44	121.56	155.06	.....	4,943.10	1,173.32	45,176.95	290
939.32	43.83	217.16	93.75	4,700.50	1,205.06	41,004.02	291
1,110.73	67.72	123.52	4.25	4,448.73	2,334.13	34,703.23	292
797.43	46.21	192.37	7.50	4,262.62	429.34	33,790.93	293
.....	.....	.....	.....	.....	.....	13,795.15	293a
\$ 299,880.11	\$ 33,309.17	\$ 63,693.82	\$ 10,082.06	\$1,326,678.09	\$ 353,490.59	\$9,008,743.40	294

EXPENDITURES BY SCHOOLS—

BUREAU OF AUDIT—1914.

Line No.	NAME OF SCHOOL	INSTRUCTION			OPERATION
		Teachers' Salaries	Educational Supplies	Total Instruction	Engineers' and Janitors' Salaries
295	Superintendents, Special Teachers.....	\$ 467,725.33	.....	\$ 467,725.33	.....
296	Board of Examiners	8,108.50	\$ 1,927.14	10,035.64	.....
297	Office Salaries, Compulsory, Census, Supply Dept.....	257,866.13	.....	257,866.13	.....
298	Office Supplies .....	.....	53,352.56	53,352.56	.....
299	Livery Stable, Gen. Expense, Miscellaneous, Supply Dept. ....	.....	.....	.....	.....
300	Total	\$ 733,699.96	\$ 55,279.70	\$ 788,979.66	.....
301	Grand Total	\$9,621,369.22	\$ 440,089.91	\$10,061,409.13	\$1,100,430.87
302	Evening High	\$ 74,708.00	\$ 9,003.76	\$ 83,711.76	\$ 7,564.59
303	Evening Elementary	91,722.50	6,997.67	98,720.17	10,829.70
304	Vacation Schools	23,885.85	6,408.72	30,294.57	4,104.70
305	Summer High Schools	14,379.25	33.45	14,412.70	603.05
306	Social Centers	18,735.50	381.01	19,116.51	4,153.20
307	Penny Lunches .....	.....	.....	.....	.....
308	Teachers' Pension Fund	87,607.23	.....	87,607.23	.....
309	Total	\$ 311,038.33	\$ 22,824.61	\$ 333,862.94	\$ 27,255.24
310	Entire Grand Total.....	\$9,932,407.55	\$ 462,804.52	\$10,395,272.07	\$1,127,686.11

- (b) Old Farragut High, 8 months.
- (c) Two months.
- (f) Branch. Fuel, light, engineer and janitor incl. in Rental.
- (g) Transportation.
- (j) Various supplies.
- (l) Incl. Offices Normal Extension and Board of Examiners.
- (k) Five months.
- * Branch. Fuel and light incl. in Rental.

JULY 1, 1913, TO JUNE 30, 1914—Continued.

OPERATION				MAINTENANCE		Grand Total	Line No.
Fuel	Light and Power	School House Supplies	Engineers' and Janitors' Overtime	Total Operation	Total General Repairs and Renewals		
						\$ 467,725.33	29
						10,035.64	29
						257,806.13	29
					\$ 7,519.05	60,871.61	29
				\$ 82,005.84	60,825.99	143,431.83	29
				\$ 82,005.84	\$ 68,345.04	\$ 939,930.54	30
\$ 361,978.56	\$ 55,287.25	\$ 73,316.38	\$ 13,906.24	\$1,687,615.14	\$ 490,831.59	\$12,239,855.86	20
\$ 5,204.47	\$ 4,336.63			\$ 17,245.09		\$ 100,957.45	30
6,037.87	4,971.96			21,839.53		120,559.70	30
				4,104.70		34,399.27	30
				608.05		15,015.75	30
1,666.90	1,460.52			7,280.02		26,397.13	30
				12,633.67		2,633.67	30
						87,607.23	30
\$ 12,999.24	\$ 10,819.11			\$ 53,707.26		\$ 387,570.20	30
\$ 374,977.80	\$ 66,106.36	\$ 73,316.88	\$ 13,906.24	\$1,741,322.40	\$ 490,831.59	\$12,627,426.06	31

STATEMENT OF SCHOOL

BUREAU OF AUDIT—1914.

Line No.	SCHOOL AND LOCATION.	SIZE OF LAND.
NORMAL SCHOOLS—		
1	Chicago Normal College—65th and Stewart ave.....	125.33x610.8
8	Chicago Normal—Arts and Gymnasium—65th and Stewart ave.....	Site included with Normal School ground..
HIGH SCHOOLS—		
3	.....	475.89x335.7
4	.....	.....
5	d Mainstem ave.....	585x297
6	'an Buren and Oakley ave.....	264.6x124.25
7	ave. and 62nd st.....	693.06x245
8	.....	.....
9	..... and Wabash ave.....	181.25x167.06
10	..... blvd. and 23rd st.....	684.6x311
11	..... nd Stony Island ave.....	409.18x300
12	..... and Union ave.....	609x125
13	..... ave. and Irving Park blvd.....	892x160
14	.....	.....
15	..... and Sedgwick sts.....	830x181.6
16	..... t. and Hoyne Ave.....	308.1x197.6
17	..... nd Prairie ave.....	300x264 and 168.35x124.16
18	..... ave. and Addison st.....	537x586 approx.
19	.....	.....
20	..... rdmore ayes.....	616.05x565.80
21	..... id N. Claremont ayes.....	394x124
22	..... d Center sts.....	297.5x125
HIGH SCHOOLS (Part High and Part Elementary)		
23	Calumet and Auburn Park (½ High)—Normal ave. and 81st st.....	422.7x232.8 Approx.
24	Curtis (½ High)—114th pl. and State st.....	280x264.09
25	Farragut (½ High)—S. Spaulding and 23rd st.....	464.33x125
26	Marshall (½ High)—Adams and Spaulding ave.....	524x182.7
27	Medill (½ High)—14th pl. near Throop st.....	366x124
28	Parker—High and Parker Practice (½ High)—65th and Stewart ave.....	See Normal School (site included with Normal School ground).
ELEMENTARY SCHOOLS—		
29	Adams—Townsend st. and Chicago ave.....	294x125.31
30	Agassiz—Seminary ave. and George st.....	305x280
31	Alcott—Wrightwood ave. and Orchard st.....	150x250 and 55.51x52.2
32	Altgeld—W. 71st and Loomis st.....	306.4x165
33	Andersen—N. Lincoln and W. Division st.....	315.06x171.8 and 193x110.4
34	Armour—W. 33rd pl. and Morgan st.....	145.8x302
35	Armstrong—Greenleaf and Pingree st.....	325.5x490.4
36	Arnold—Burling and Center sts.....	230x124 and 88x124
37	Audubon—Hoyne ave. and Cornelia st.....	278.46x264
38	Avondale—N. Sawyer ave. and Wellington st.....	306x123
39	Avondale Branch—Diversey st. and Milwaukee ave.....	Triangle—201.8, 183.2 and 228.8 ft.
40	Bancroft—N. Maplewood ave. and North ave.....	246x125
41	Barnard—104th st. and Charles st.....	369.9x397
42	Barnard Branch—Aberdeen st. and W. 98th st.....	150.87x150
43	Bass—S. May and 66th sts.....	238.88x265.14
44	Beale—S. Sangamon st. and W. 61st st.....	597.1x125
45	Beaubien—32nd and W. Argyle st.....	297.5x308.89
46	Beaubien Branch 1—Ormonde ave. and Carpenter road.....	Triangular—195, 216.6 and 236.8 ft.
47	Beaubien Branch 2—Lawrence ave. and 86th st.....	436.48x307.6

PROPERTY, JUNE 30, 1914.

Cost of Land.	Cost of Bldgs.	Cost of Betterments.	Cost of Equipment and Furniture.	Total Cost of Land, Bldgs., Betterments and Furniture.	Date of Erection.	Line No.
\$ 23,376.00	\$ 484,951.00	\$ 17,408.00	\$ 38,146.00	\$ 563,881.00	1902	1
.....	406,510.00	Uncompleted	.....	406,510.00	.....	2
10,524.00	156,016.00	26,461.00	10,692.00	203,692.00	1889-1905	3
.....	10,046.00	Uncompleted	.....	10,046.00	.....	4
53,423.00	474,496.00	13,841.00	56,191.00	598,950.00	1910	5
42,898.00	307,464.00	24,474.00	118,828.00	494,659.00	1903	6
30,000.00	398,531.00	19,922.00	18,356.00	461,809.00	1887-89-1906-08	7
.....	250.00	Uncompleted	.....	250.00	.....	8
31,416.00	112,679.00	5,516.00	7,485.00	156,996.00	1884-1912	9
125,347.00	812,448.00	Uncompleted	.....	937,790.00	.....	10
108,643.00	704,992.00	Uncompleted	.....	818,635.00	.....	11
30,534.00	266,851.00	38,101.00	56,083.00	390,019.00	1886-1906	12
21,725.00	192,660.00	20,471.00	13,182.00	248,028.00	1886-1899	13
.....	41.00	Uncompleted	.....	41.00	.....	14
24,316.00	626,540.00	7,808.00	123,905.00	781,564.00	1908	15
79,132.00	320,650.00	6,526.00	8,976.00	417,834.00	1904	16
107,263.00	365,764.00	24,849.00	22,220.00	520,096.00	1904	17
26,000.00	473,719.00	12,000.00	60,615.00	572,394.00	1910	18
.....	113.00	Uncompleted	.....	113.00	.....	19
46,730.00	771,066.00	Uncompleted	.....	817,796.00	.....	20
76,108.00	180,037.00	19,087.00	18,159.00	268,861.00	1892-1898	21
50,478.00	344,862.00	4,436.00	11,056.00	310,890.00	1901-1902	22
.....
23,000.00	104,200.00	11,870.00	6,050.00	144,660.00	1891	23
20,000.00	240,855.00	20,846.00	8,592.00	289,798.00	1893-1906	24
28,898.00	231,557.00	14,740.00	23,601.00	288,496.00	1894-1909	25
63,658.00	245,329.00	57,876.00	17,338.00	383,700.00	1895-1903-9	26
61,668.00	231,196.00	16,187.00	12,612.00	321,683.00	1895-1897	27
.....	260,585.00	6,986.00	6,508.00	244,034.00	1899-1902	28
.....
76,601.00	86,257.00	20,378.00	4,208.00	186,444.00	1896	29
92,625.00	173,230.00	68.00	4,638.00	270,576.00	1912	30
24,000.00	83,500.00	6,809.00	3,690.00	117,909.00	1883-1899	31
17,984.00	171,761.00	12,168.00	4,669.00	206,532.00	1905	32
49,780.00	109,980.00	13,810.00	5,611.00	179,131.00	1885-93	33
12,865.00	99,553.00	6,430.00	2,500.00	121,848.00	1901	34
10,096.00	169,451.00	15,504.00	3,420.00	198,471.00	1912	35
30,312.00	91,110.00	4,606.00	3,552.00	129,640.00	1884	36
16,182.00	134,225.00	11,562.00	5,044.00	167,013.00	1894-1906	37
22,302.00	126,055.00	12,297.00	4,515.00	165,129.00	1895-1901	38
5,000.00	10,500.00	.....	500.00	16,000.00	1880	39
16,511.00	76,200.00	10,208.00	3,000.00	107,914.00	1892	40
5,165.00	73,005.00	22,453.00	2,622.00	108,245.00	1893	41
1,000.00	2,100.00	1,004.00	150.00	4,314.00	1886	42
22,626.00	74,100.00	3,842.00	3,150.00	108,718.00	1895	43
42,673.00	126,780.00	10,340.00	4,689.00	183,482.00	1892-1898	44
3,485.00	128,535.00	15,059.00	2,627.00	149,706.00	1905	45
Donated	9,265.00	147.00	150.00	9,532.00	1896	46
18,027.00	.....	.....	.....	18,027.00	.....	47

PUBLIC SCHOOLS.

STATEMENT OF SCHOOL.

BUREAU OF AUDIT—1914.

Line No.	SCHOOL AND LOCATION.	SIZE OF LAND.
48	Beethoven—Berteau ave. and Sacramento ave.....	381x106
49	Beidler—Mainut st. and Kedzie ave.....	309.1x150
50	Beidler Addition .....	.....
51	Belding—42nd ct. and W. Cullom ave.....	487.25x155
52	Bismarck—N. Central Pk. ave. and Armitage.....	241.5x206.5
53	Blaine—Grace st. and Southport ave.....	375x125.1
54	Bradwell—Sherman ave. and E. 77th st.....	297x167
55	Brainard—Washburne and Hoyne ave.....	225.63x124
56	Brainard Heating Plant.....	.....
57	Brenan—Lime st. and 27th st.....	275x109
58	Brentano—N. Fairfield and Diversey aves.....	472½x125.8
59	Brentano Branch—Diversey and California aves.....	125x115.5
60	Brown—Warren ave. and Wood st.....	266x122.1
61	Brownell—Perry ave. and 65th st.....	184.1x174 and 149x100.1.....
62	Bryant—So. 41st ct. and W. 13th st.....	524.5x125.7.....
63	Bryn Mawr—74th st. and Jeffrey ave.....	297.85x273.1
64	Burke—So. Park ave. and 54th st.....	300x180
65	Burke Br.—Prairie ave. and 52nd st.....	200x179.75
66	Burley—Barry ave. and N. Paulina st.....	266x254
67	Burns—25th st. and Central Park ave.....	485x124.87
68	Burnside—91st st. and Langley ave.....	277x266.5
69	Burnside Addition .....	.....
70	Burr—Wabansia ave. and N. Ashland ave.....	296.2x267.3 and 125.15x72.....
71	Burrroughs—35th pl. and S. Washtenaw ave.....	284.5x266
72	Byford—Iowa st. and N. Central ave.....	283.1x264.86.....
73	Calhoun—So. Francisco ave. and Adams st.....	270x121 and 137.1x84.....
74	Cameron—Potomac and Monticello aves.....	Irrig.—Approx. 318.3x158.....
75	Carpenter—No. Center ave. and W. Huron st.....	270.5x206
76	Carter Practice—Wabash ave. and E. 61st st.....	346.5x162
77	Carter District—Michigan ave. and 58th st.....	339.8x267
78	Chalmers—So. Fairfield ave. and 12th st.....	263.5x153¼ ft.....
79	Chase—Point st. and Francis ct.....	264x200.....
80	Chicago Lawn—So. Homan and 65th st.....	312.35x264.24.....
81	Chicago Lawn Addition.....	.....
82	Chopin—No. Campbell and Iowa st.....	279x265.36
83	Clarke—So. Ashland ave. and W. 13th st.....	272x264.3
84	Clay—E. 133rd st. and Superior ave.....	274.43x131.57
85	Cleveland—Byron st. and Troy st.....	304.5x266.86.....
86	Colman—So. Dearborn st. and 46th st.....	365x100
87	Columbus—Augusta and N. Leavitt sts.....	431.75x126.8 and 126.8x103.75.....
88	Coonley—No. Leavitt and Bell Plaine ave.....	450x124.2.....
89	Cooper—W. 19th st. and Ashland ave.....	250x125 and 150x125.....
90	Copernicus—Throop and W. 60th sts.....	372.8x249
91	Corkery—W. 25th st. and So. 43rd ave.....	362.26x266
92	Cornell—Drexel ave. and 75th st.....	445.5x264
93	Cregier—Selden, Wood and Yeaton sts.....	371.9x212.26.....
94	Crerar—Campbell ave. and Taylor st.....	268.6x125
95	Dante—So. Desplaines st. and Ewing st.....	284x235.8
96	Darwin—Edgewood ave. and Catalpa ct.....	379x140.5
97	Davis—So. Sacramento ave. and 39th st.....	607.2x262.12
98	Delano—So. Springfield ave. and Adams st.....	458.91x258.94
99	Detention Home—Ewing and Forquer st.....	150x118.....
100	Dewey—54th st. and Union ave.....	265.39x201 and 125x75.....
101	Doolittle—35th st., near Rhodes ave.....	345x231
102	Dore—Harrison st., near Halsted st.....	250x111
103	Douglas—E. 32nd st. and Forest ave.....	346x125.45
104	Drake—Calumet ave. and 26th st.....	349x177.75
105	Drummond—Clybourn pl. and N. Lincoln st.....	264x197
106	Dunning School—W. Addison st. and 64th ave.....	165x122.9
107	Dunning Br.—58th ave. and Irving Pk. blvd.....	149.87x123.03
108	Earle—W. 61st st. and So. Paulina st.....	309x264.66

PROPERTY, JUNE 30, 1914.

Cost of Land.	Cost of Bldgs.	Cost of Betterments.	Cost of Equipment and Furniture.	Total Cost of Land, Bldgs., Betterments and Furniture.	Date of Erection.	Lin No
12,156.00				12,156.00	Vacant	4
32,200.00	47,500.00	7,005.00	2,401.00	89,856.00	1881	49
	8,813.00	Uncompleted		8,813.00		50
18,350.00	163,985.00	19,556.00	3,832.00	205,823.00	1901-1902	51
42,306.00	75,450.00	10,949.00	3,311.00	132,056.00	1896	52
21,191.00	176,156.00	8,033.00	6,842.00	211,792.00	1903-1905	53
6,529.00	97,214.00	10,759.00	4,491.00	118,793.00	1889-1896	54
12,466.00	49,200.00	4,609.00	2,766.00	69,101.00	1885	55
	20,859.00	Uncompleted		20,859.00		56
8,500.00	56,295.00	12,449.00	2,400.00	79,644.00	1894	57
27,152.00	199,359.00	8,326.00	4,000.00	239,437.00	1893-1909	58
2,500.00	6,400.00	2,500.00	750.00	12,150.00	1883	59
31,000.00	87,100.00	13,600.00	3,000.00	135,800.00	1857-1870	60
20,565.00	61,780.00	6,625.00	2,027.00	90,997.00	1888-1904	61
21,186.00	183,616.00	10,893.00	4,781.00	220,476.00	1894-1907	62
17,429.00	135,922.00	2,435.00	2,255.00	158,101.00	1903-1914	63
47,647.00	116,257.00	2,902.00	2,293.00	169,099.00	1912	64
16,000.00	50,694.00	6,453.00	1,650.00	74,797.00	1899-1896	65
22,614.00	87,510.00	9,507.00	5,155.00	124,186.00	1896	66
15,445.00	153,250.00	7,718.00	4,550.00	180,963.00	1882-1903	67
19,169.00	58,440.00	7,556.00	2,401.00	87,566.00	1898	68
	144,249.00	Uncompleted		144,249.00		69
20,200.00	250,289.00	27,538.00	5,849.00	303,876.00	1873-1885-1907	70
25,576.00	88,352.00	9,067.00	2,100.00	125,095.00	1893-1913	71
25,316.00	163,725.00	4,171.00	4,561.00	197,773.00	1892-1909	72
24,097.00	106,650.00	8,281.00	3,750.00	137,778.00	1891-1897	73
19,412.00	105,110.00	7,812.00	3,000.00	135,934.00	1897-1905	74
26,339.00	117,950.00	23,426.00	5,326.00	173,151.00	1892-1891	75
31,698.00	87,800.00	9,432.00	3,971.00	132,401.00	1885-1891	76
32,138.00	169,305.00	439.00	4,856.00	256,738.00	1913	77
7,820.00	62,650.00	20,490.00	3,000.00	93,960.00	1886	78
9,000.00	66,800.00	18,348.00	2,650.00	96,818.00	1894	79
11,010.00	120,228.00	8,410.00	1,951.00	141,599.00	1906	80
	2,714.00	Uncompleted		2,714.00		81
18,338.00				18,338.00	Vacant	82
64,676.00	287,415.00	9,219.00	7,763.00	369,093.00	1893-1893-1913	83
12,564.00	19,016.00	16,510.00	1,200.00	49,290.00	1897	84
15,510.00	257,911.00	3,899.00	5,161.00	282,481.00	1911	85
55,650.00	60,540.00	13,568.00	2,401.00	132,159.00	1897-1908	86
37,286.00	177,032.00	8,911.00	3,272.00	226,501.00	1896-1911	87
21,540.00	116,375.00	8,048.00	3,049.00	149,012.00	1902-1906	88
48,696.00	102,114.00	21,331.00	4,121.00	176,262.00	1885-1903-1911	89
41,828.00	182,187.00	6,536.00	6,495.00	237,046.00	1905-1907	90
17,676.00	214,567.00	6,769.00	3,487.00	242,499.00	1911	91
50,745.00	187,001.00	2,222.00	3,853.00	243,821.00	1906-1909	92
130,806.00	86,989.00	Uncompleted		167,794.00		93
13,430.00	76,000.00	5,864.00	2,400.00	97,694.00	1892	94
151,140.00	291,058.00	5,318.00	5,550.00	453,066.00	1903-1908	95
23,087.00	108,675.00	9,816.00	3,601.00	150,179.00	1900	96
19,713.00	134,454.00	9,862.00	3,278.00	167,307.00	1905-1913	97
50,220.00	164,481.00	383.00	3,118.00	218,152.00	1913	98
36,729.00	42,008.00	Uncompleted		78,737.00		99
43,416.00	120,665.00	1,326.00	3,451.00	168,858.00	1909	100
46,607.00	96,198.00	32,629.00	4,138.00	179,572.00	1881-1885	101
45,000.00	119,475.00	5,942.00	3,750.00	174,167.00	1867-1893	102
41,896.00	96,668.00	21,329.00	3,675.00	163,568.00	1889	103
42,010.00	88,300.00	8,894.00	3,000.00	142,204.00	1900	104
30,010.00	78,975.00	20,257.00	4,296.00	128,538.00	1898	105
1,000.00	7,200.00	742.00	450.00	9,392.00	1884	106
4,546.00	732.00	3,879.00		9,157.00		107
14,980.00	86,690.00	5,788.00	5,421.00	111,809.00	1896-1900	108

STATEMENT OF SCHOOL

BUREAU OF AUDIT—1914.

Line No.	SCHOOL AND LOCATION.	SIZE OF LAND.
109	Emerson—Walnut and Paulina st.....	177.20x111.15
110	Emmet—Madison st. and Pine ave.....	369x175 and 319x200.....
111	Ericsson—W. Harrison and So. Sacramento ave.....	225x154
112	Everett—So. Irving ave. and W. 34th st.....	268x125
113	Fallon—W. 42nd st. and Lowe ave.....	265.67x189
114	Farren—E. 35th st. and So. Wabash ave.....	371.8x160.8
115	Felsenthal—E. 41st st. and Calumet ave.....	296x128
116	Fenger—Stewart ave. and 114th st.....	455x263.44
117	Field—No. Ashland and Greenleaf aves.....	363.5x282
118	Field Addition .....	.....
119	Field Br.—No. Robey st. and Lunt ave.....	200x172
120	Fiske—Ingleside ave. and 61st st.....	547.46x170.8
121	Forestville—St. Lawrence ave. and 45th st.....	369x125.3 and 151.8x102.....
122	Forestville Addition.....	.....
123	Foster—Union and O'Brien st.....	320x173
124	Franklin—Goethe and Wells st.....	300x220
125	Franklin Addition .....	.....
126	Froebel—W. 21st st. and Hoyne ave.....	225x126.6
127	Fuller—42nd st. and St. Lawrence ave.....	260.5x125
128	Fulton—W. 53rd st. and Hermitage ave.....	300x265
129	Gage Park—W. 55th st. and S. Rockwell st.....	294.8x95 and 225x128.3.....
130	Gage Park Br. 1—So. Oakley ave. and 50th st.....	264.9x133
131	Gallistel—E. 104th st. and Ewing ave.....	318x267
132	Gallistel Br.—Green Bay ave. and 110th st.....	260x125
133	Garfield—W. 14th pl. and Johnson st.....	228x215.4
134	Gary—Hamlin ave. and 30th st.....	600x596
135	Gladstone—So. Robey st. and Washburne ave.....	408.53x124.24 and 176.53x140.24.....
136	Goethe—No. Rockwell st. and Fullerton ave.....	324.65x183.48.....
137	Goodrich—W. Taylor and Sangamon st.....	397x100
138	Goudy—Foster and Winthrop ave.....	200x148.5
139	Graham—Union ave. and 44th pl.....	300.75x264
140	Grant—Wilcox ave. and So. Campbell ave.....	232x122
141	Gray—Grace st. and No. 52nd ave.....	608.7x165.42
142	Gray Br.—Irving Pk. blvd. and 47th st.....	Irreg.—Approx. 160x150.....
143	Greeley—Grace st. and Sheffield ave.....	242.2x141 and 150x75.....
144	Greene—W. 36th st. and So. Paulina st.....	250x125 and 141x134.....
145	Gresham—85th st. and So. Green st.....	306x165.67.....
146	Gresham Br. 1—So. Ada st. and 88th st.....	300x126.....
147	Haines—W. 23rd pl. and Princeton ave.....	425x125
148	Hamilton—Cornelia and N. Paulina st.....	266x159
149	Hamline—W. 48th st. and Bishop st.....	362x124.25
150	Hammond—W. 21st pl. and California ave.....	366x125
151	Hancock—Swan st. and Princeton ave.....	330.5x101.5
152	Hanson Park—Mont Clare (A)—No. 55th st. and Grand ave.	School Fund property
153	Hanson Park—Mont Clare (B)—Palmer st. and New England ave.	198.85x200.32
154	Harper—W. 65th st. and So. Wood st.....	346x206
155	Harper Br.—So. Oakley ave. and 64th st.....	122x125
156	Harvard—Harvard ave. and W. 75th st.....	399.74x161.2
157	Haugan—Hamlin and Wilson ave.....	596.26x268.38
158	Haven—Wabash ave., between 14th and 16th sts....	180x150
159	Hawthorne—School st. and Clifton ave.....	263.8x192
160	Hayes—No. Leavitt and Walnut st.....	267x124
161	Hayt—Granville ave. and Perry st.....	455.9x136.48
162	Hayt Br. (Rosehill)—No. Clark st. and Peterson ave.....	200x163.35
163	Headley—Lewis st. and Garfield ave.....	195.4x125
164	Healy—Wallace st. and 30th st.....	266.36x227.....
165	Hedges—48th st. and Winchester ave.....	457.5x124.66
166	Hendricks—43rd st. and Shields ave.....	196x124

PROPERTY. JUNE 30, 1914.

Cost of Land.	Cost of Bldgs.	Cost of Betterments.	Cost of Equipment and Furniture.	Total Cost of Land, Bldgs., Betterments and Furniture.	Date of Erection.	Line No.
25,320.00	50,800.00	6,624.00	2,401.00	84,645.00	1884	109
48,515.00	142,828.00	5,114.00	2,943.00	199,395.00	1898-1913	110
(Part School)	Fund Land)					
13,500.00	69,595.00	14,866.00	3,747.00	101,708.00	1893	111
5,085.00	80,425.00	11,323.00	3,027.00	99,820.00	1892	112
22,320.00	81,215.00	16,007.00	3,729.00	123,271.00	1890-1908	113
38,894.00	108,855.00	20,618.00	3,300.00	166,167.00	1882-1898	114
44,105.00	102,736.00	5,357.00	3,508.00	155,701.00	1901	115
14,539.00				14,539.00		116
41,480.00	63,290.00	8,542.00	2,333.00	115,645.00	1890-1900	117
	846.00	Uncompleted		846.00		118
7,000.00	(Vacant)			7,000.00		119
45,021.00	175,687.00	3,799.00	3,566.00	228,073.00	1905-1911	120
60,969.00	106,076.00	17,660.00	3,883.00	187,588.00	1892-1898	121
	7,888.00	Uncompleted		7,888.00		122
47,808.00	153,302.00	17,311.00	5,401.00	223,816.00	1867-1901	123
113,510.00	143,100.00	16,664.00	3,750.00	277,024.00	1896	124
	208.00	Uncompleted		208.00		125
6,525.00	88,555.00	9,145.00	3,250.00	107,475.00	1885	126
38,048.00	64,280.00	3,208.00	2,373.00	107,899.00	1884-1890	127
15,457.00	172,958.00	3,876.00	4,580.00	196,871.00	1895-1911	128
6,825.00	10,950.00	696.00	600.00	19,061.00	1898	129
5,098.00	1,350.00	1,713.00	300.00	8,451.00	1896	130
13,873.00	194,297.00	14,486.00	5,014.00	227,670.00	1908-1911	131
4,500.00	1,550.00	447.00	300.00	6,797.00	1885	132
85,441.00	284,592.00	10,842.00	7,582.00	387,957.00	1882-1884-1910	133
20,018.00	257,722.00	9,658.00	6,742.00	294,140.00	1911	134
35,669.00	188,300.00	14,583.00	5,622.00	244,234.00	1884-1911	135
27,080.00	76,850.00	13,309.00	4,310.00	121,029.00	1895	136
62,771.00	96,180.00	11,111.00	4,572.00	174,604.00	1890-1896	137
5,245.00	48,675.00	17,687.00	2,444.00	74,051.00	1892	138
49,926.00	196,980.00	20,772.00	4,462.00	242,040.00	1905	139
17,300.00	78,208.00	8,820.00	3,093.00	107,481.00	1885-1913	140
6,867.00	177,477.00	1,407.00	4,561.00	190,312.00	1911	141
1,000.00	8,000.00	4,686.00	500.00	14,196.00	1896	142
24,545.00	67,400.00	9,156.00	3,150.00	104,311.00	1894	143
31,188.00	75,925.00	10,380.00	3,150.00	120,643.00	1895	144
19,536.00	62,272.00	10,465.00	1,770.00	94,033.00	1895-1913	145
6,467.00	16,390.00	6,663.00	1,040.00	30,560.00	1889	146
51,502.00	143,605.00	24,507.00	4,651.00	224,265.00	1886-1901	147
16,378.00	154,323.00	3,634.00	3,750.00	178,085.00	1903-05	148
20,027.00	81,670.00	11,000.00	3,751.00	116,448.00	1880-1898	149
28,518.00	178,840.00	7,315.00	4,389.00	219,092.00	1890-1912	150
12,500.00	40,500.00	9,324.00	2,854.00	65,178.00	1886	151
36.00	5,670.00	1,823.00	751.00	8,280.00	1877-1896	152
	8,925.00	5,204.00	600.00	14,729.00	1895	153
14,434.00	256,982.00	3,791.00	6,431.00	281,588.00	1910	154
2,500.00	1,450.00	700.00	300.00	4,950.00	1902	155
21,283.00	113,705.00	7,052.00	2,801.00	149,841.00	1905	156
18,198.00	165,723.00	10,170.00	2,287.00	196,378.00	1912	157
52,500.00	78,950.00	9,600.00	4,619.00	145,669.00	1885	158
23,319.00	82,850.00	6,910.00	3,750.00	116,829.00	1896-1894	159
26,700.00	46,450.00	6,097.00	2,400.00	81,647.00	1868	160
19,918.00	186,181.00	10,735.00	2,638.00	219,419.00	1906	161
2,500.00	34,051.00	584.00	2,744.00	39,879.00	1891-1911	162
5,880.00	56,711.00	6,481.00	1,800.00	70,842.00	1903	163
54,829.00	86,811.00	39,080.00	4,079.00	184,779.00	1885-1896-1908	164
12,323.00	108,473.00	7,817.00	3,600.00	192,263.00	1890-1906	165
7,000.00	37,880.00	21,521.00	2,746.00	69,147.00	1864	166

STATEMENT OF SCHOOL.

BUREAU OF AUDIT—1914.

Line No.	SCHOOL AND LOCATION.	SIZE OF LAND.
167	Henry—Cullom and Eberly ave.....	321.79x267.04
168	Herzl—Douglas blvd. and 13th st.....	503.25x141 and 200x125.....
169	Holden—31st st. and Loomis st.....	260x236.4
170	Holmes—So. Morgan st. and 56th st.....	463.4x127.67
171	Howe—W. Superior st. and Willow ave.....	353.6x283.84
172	Howland—W. 16th st. and Spaulding ave.....	292x205.90
173	Hyde Park High Br.—54th st. and Monroe ave.....	192x166
174	Irving—Lexington st. and So. Leavitt st.....	457.18x125
175	Irving Addition .....	.....
176	Irving Park—N. 41st ct. and Grace st.....	450x173.6.....
177	Jackson—Sholto st., bet. Good and Damon st.....	216x232
178	Jahn—Lincoln st. and Belmont ave.....	218.72x246.8
179	Jefferson—Elburn ave. and Laflin st.....	345.2x104.5
180	Jenner—Milton and Oak st.....	230x200
181	Jirka—W. 17th st. and Laflin st.....	336x124
182	Jones—W. Harrison and Plymouth ct.....	175x100
183	Jungman—Nutt and W. 18th st.....	454x124
184	Jungman Addition .....	.....
185	Keeler Ave.—N. 41st ct. and Hirsch st.....	192x125.75
186	Keith—34th st and Dearborn st.....	200x122.10
187	Kenwood—E. 50th st. and Washington ave.....	240x171.72
188	Kershaw—Union ave and W. 64th st.....	469.05x234
189	Key—W. Ohio st. and Park ave.....	470x135.25
190	King—W. Harrison st and S. Western ave.....	196x158.....
191	Kinzle—Ohio st. and La Salle ave.....	199.1x100.....
192	Kinzle Branch—Huron st. and Franklin st.....	150x100
193	Knickerbocker—Clifton and Belden aves.....	200x124
194	Kohn—W. 104th st. and State st.....	583.4x206.15
195	Kohn Branch No. 1—101st and Union ave.....	198.4x125.16
196	Kohn Branch No. 2—W. 103rd st and Michigan ave.....	124.94x99
197	Komensky—Throop and 20th st.....	354x125.5
198	Kosclusko—Holt and Cleaver st.....	271.5x164.75
199	Kozminski—Ingleside ave and 54th st.....	363x158.5
200	La Fayette—Augusta st. and Wastenau ave.....	256.25x181.25
201	Langland—Cortland st. and Oakley ave.....	300x100.....
202	La Salle—Hammond and Eugenia st.....	200x125.5
203	Lawson—W. 13th pl. and Homan ave.....	354.5x319.....
204	Lawson Addition.....	.....
205	Lewis Champlin—62nd st and Princeton ave.....	See Englewood High
206	Libby—Loomis and 53rd sts.....	250x124.47
207	Lincoln—Hamilton ct. and Kemper st.....	297x132.5 and 157.37x120.....
208	Linne—Sacramento ave. and W. School st.....	412.97x125.75.....
209	Lloyd—N. 49th ave and Dickens ave.....	444.4x267.2
210	Lloyd Branch No. 2—48th ave and Montana st.....	200x120
211	Logan—N. Oakley ave and Rhine st.....	216x179
212	Longfellow—W. 35th st and Winchester ave.....	267x134
213	Lowell—Hirsch st and Spaulding ave.....	424.6x123.9
214	Lowell Addition.....	.....
215	Madison—Madison ave and 74th st.....	300x125.78
216	Madison Branch—Kimbark ave. and 80th st.....	161.43x126
217	Manierre—Hudson ave. and Blackhawk st.....	300x124.5.....
218	Mann—37th st and Princeton ave.....	193.44x125
219	Mann Branch—Armour ave and 40th st.....	104.5x104
220	Marquette—S. Wood and Harrison sts.....	289x125.87
221	Marsh—E. 98th st and Escanaba ave.....	293.5x207
222	Marsh Branch No. 2—Sheridan ave and 121st st.....	99x150
223	May (School Fund Land)—S. 50th ave and W. Harrison st.....	297.5x176.....
224	Mayfair—W. Wilson ave and 46th ave.....	270x250
225	Mayfair (Old)—Lawrence ave and N. 44th ave.....	209.22x208.56
226	Mitchell—N. Oakley ave and W. Ohio st.....	205x125 and 352x100.....

PROPERTY, JUNE 30, 1914.

Cost of Land.	Cost of Bldgs.	Cost of Betterments.	Cost of Equipment and Furniture.	Total Cost of Land, Bldgs., Betterments and Furniture.	Date of Erection.	Line No.
25,045.00	179,885.00	8,284.00	4,245.00	217,559.00	1904-1907	167
62,978.00	240.00	Uncompleted		64,218.00		168
12,000.00	128,350.00	29,186.00	4,819.00	174,355.00	1868-1893	169
26,540.00	185,738.00	6,664.00	3,800.00	222,742.00	1894-1911	170
28,964.00	142,413.00	7,988.00	3,568.00	182,978.00	1896-1911	171
66,034.00	165,945.00	7,775.00	6,764.00	246,518.00	1893-1913	172
10,200.00	27,744.00	2,664.00	1,200.00	41,808.00	1840-1908	173
43,248.00	58,300.00	7,665.00	2,401.00	111,614.00	1884	174
	169,181.00	Uncompleted		169,181.00		175
21,152.00	177,288.00	4,496.00	3,912.00	206,855.00	1911	176
71,149.00	261,906.00	11,101.00	6,544.00	350,700.00	1894-1909	177
41,952.00	207,941.00	796.00	3,547.00	254,266.00	1908	178
40,520.00	188,066.00	4,164.00	4,727.00	237,477.00	1884-1911-1913	179
92,820.00	186,300.00	5,708.00	4,346.00	289,174.00	1880-1908	180
58,455.00	91,665.00	13,827.00	3,879.00	167,846.00	1899	181
64,000.00	46,500.00	5,867.00	2,551.00	118,908.00	1875	182
68,056.00	125,220.00	1,591.00	3,450.00	198,279.00	1903	183
	89,980.00	Uncompleted		89,980.00		184
3,975.00	8,820.00	2,630.00	900.00	16,325.00	1894	185
15,000.00	60,725.00	10,185.00	2,251.00	88,161.00	1883	186
45,500.00	125,129.00	8,443.00	4,134.00	183,206.00	1889-1912	187
34,246.00	120,430.00	20,357.00	4,512.00	179,545.00	1883-1893	188
53,794.00	145,157.00	3,264.00	2,057.00	204,272.00	1907	189
10,000.00	86,851.00	5,103.00	2,551.00	103,505.00	1873-1885	190
29,550.00	50,528.00	9,569.00	1,977.00	91,644.00	1872	191
13,460.00	39,500.00	5,616.00	1,800.00	60,376.00	1881	192
11,000.00	75,450.00	6,323.00	2,766.00	95,539.00	1892	193
6,450.00	179,749.00	1,121.00	3,733.00	191,053.00	1911	194
2,380.00	63,249.00	1,105.00	1,429.00	68,163.00	1901	195
1,750.00	2,750.00		300.00	4,800.00	1879	196
29,178.00	113,670.00	8,892.00	4,050.00	155,790.00	1882-1891	197
161,754.00	219,037.00	2,589.00	4,474.00	327,844.00	1906	198
45,808.00	93,430.00	4,027.00	3,000.00	146,265.00	1897	199
15,402.00	114,400.00	15,099.00	4,917.00	149,818.00	1893-1898	200
33,110.00	117,040.00	1,717.00	2,700.00	154,567.00	1884-1904	201
8,805.00	96,557.00	11,131.00	3,369.00	119,862.00	1882-1893-1909	202
66,192.00	84,900.00	5,708.00	2,850.00	161,650.00	1896	203
	108,581.00	Uncompleted		103,581.00		204
	98,300.00	10,273.00	4,461.00	113,034.00	1874-1886	205
4,600.00	118,030.00	5,885.00	4,275.00	132,790.00	1902	206
54,646.00	94,782.00	20,873.00	3,601.00	173,902.00	1870-1894	207
16,434.00	130,134.00	4,326.00	3,502.00	154,396.00	1835-1904	208
9,674.00	212,615.00	5,694.00	2,538.00	230,521.00	1907-1913	209
2,100.00	9,625.00	1,412.00	600.00	13,737.00	1874	210
18,252.00	59,510.00	9,065.00	2,701.00	89,528.00	1889	211
15,709.00	74,038.00	24,271.00	3,400.00	117,418.00	1880-1886	212
16,451.00	70,420.00	8,660.00	3,000.00	96,531.00	1894	213
	118,448.00	Uncompleted		118,448.00		214
14,195.00	82,650.00	8,894.00	3,135.00	106,874.00	1883-1900	215
4,440.00	8,875.00	1,518.00	600.00	15,433.00	1894	216
28,779.00	84,722.00	9,680.00	2,550.00	125,731.00	1885-1914	217
10,800.00	70,300.00	7,914.00	2,650.00	91,664.00	1890	218
5,150.00	40,000.00	6,476.00	1,350.00	52,976.00	1886	219
20,050.00	127,059.00	16,629.00	5,100.00	168,838.00	1879-1890	220
8,398.00	163,908.00	7,477.00	1,930.00	181,713.00	1910	221
1,045.00	2,050.00		150.00	3,245.00	1878	222
	121,714.00	5,460.00	2,253.00	129,427.00	1905	223
	24,500.00	5,230.00	1,520.00	39,750.00	1883	224
8,500.00	6,700.00	1,183.00	450.00	10,833.00	1889 Leased	225
2,000.00	123,500.00	19,605.00	5,918.00	162,166.00	1880-1892	226
18,148.00						

STATEMENT OF SCHOOL

BUREAU OF AUDIT—1914.

Line No.	SCHOOL AND LOCATION.	SIZE OF LAND.
227	Monroe—Schubert ave and Monticello ave.....	108.5x280
228	Montefiore—N. Sangamon st and Grand ave.....	316x116.1.....
229	Moos—California ave and Fairfield ave.....	285.38x267
230	Morris—Barry ave and Blucher st.....	231.96x132.3 and 132.3x99.....
231	Morse—W. Ohio st and Spaulding ave.....	294.65x206.38
232	Moseley—Michigan blvd. and E. 24th st.....	198.99x193
233	Motley—Ada st. and Chicago ave.....	318x108
234	Mozart—Humboldt and Avers ave.....	374x206.78
235	Mulligan—Sheffield ave and Willow st.....	192x125
236	McAllister—36th st. and Gage st.....	250x147
237	McClellan—Wallace and 35th sts.....	124x125 and 100x06.....
238	McCormick—Sawyer ave. and W. 27th st.....	398.24x125.13
239	McCosh—Langley ave. and E. 65th st.....	216x259.88
240	McLaren—York and Laflin st.....	224x162.6 and 150x125.....
241	McPherson—Lincoln st. and Lawrence ave.....	325.1x281.5.....
242	McPherson Branch—Winnemac ave, near Robey st..	School Fund Land.....
243	Nash—W. Erie st. and N. 49th ave.....	435x120.5
244	Nash Branch—Ontario st. and 48th ave.....	150x120.35
245	Nettelhorst—Evanston ave and Melrose st.....	350.43x289.16
246	Newberry—Willow and Orchard sts.....	300x148.5 and 181.3x20.....
247	Nixon—Dickens ave. and N. 42nd ave.....	459x125.5 and 135x141.5.....
248	Nixon Addition.....	.....
249	Nixon Branch—Armitage and Tripp aves.....	125x108
250	Nobel—N. 41st and Hirsch st.....	275.5x263.24.....
251	Norwood Park—Walnut st. and Cheney ave.....	200x174.2
252	Norwood Park Branch No. 1—Edison Park ave. and La Salle st.....	182x144
253	Norwood Park Branch No. 2—Elston ave and N. 62nd ave.....	Triangle—208, 140.2, 246.6.....
254	Oakland—40th st. and Langley ave.....	300x193
255	Ogden—W. Chestnut st. and Dearborn ave.....	178.5x106.5
256	Oglesby—W. 77th and S. Peoria sts.....	364x165
257	Oglesby Addition.....	.....
258	Otis—Armour st. and Grand ave.....	356x142 and 170x75.....
259	Parental—Foster and Central Park aves.....	40a School Fund Land and 30a Bought for.....
260	Parkman—51st st and Princeton ave.....	283x201.95
261	Park Manor (old)—71st and Rhodes ave.....	506x123.8
262	Park Manor (new)—E. 72nd st. and Calumet ave...	382.27x339.44
263	Park Manor Branch—E. 74th st. and Langley ave..	295.9x136.3
264	Parkside—E. 70th st. and East End ave.....	632.16x162.8
265	Peabody—Augusta and Noble sts.....	192x124.8
266	Peirce—Bryn Mawr ave. and Clark st.....	400.55x287.4
267	Penn—W. 16th st. and S. Springfield ave.....	342x274.78
268	Pickard—S.Oakley ave. and W. 21st st.....	271.5x272.5
269	Plamondon—W. 15th pl. and S. Washtenaw ave....	109.02x124.5 and 66x124.5.....
270	Poe—E. 105th pl. and Fulton ave.....	267.15x241
271	Prescott—Wrightwood and Ashland aves.....	266x175
272	Pulaski—N. Leavitt st. and Lubeck st.....	216x180
273	Pullman—E. 113th st. and Watt ave.....	285x264
274	Pullman—Lyden and Indiana aves.....	Triangle of about 50-100 acre.....
275	Raster—W. 70th st. and S. Wood st.....	456.4x265.14
276	Raster Branch—Western ave. and 79th st.....	204x132
277	Ravenswood—Montrose ave. and N. Paulina st.....	502x165
278	Ravenswood Addition.....	.....
279	Ray (new)—Kimbark ave. and E. 56th st.....	400x175.6 and 100x90.9.....
280	Ray (old)—Monroe ave. and E. 57th st.....	198.3x175
281	Ray Branch—E. 56th st. and Stony Island ave....	164x47
282	Raymond—Wabash ave. and 36th st.....	182x175
283	Reilly—School st. and Monticello ave.....	394.52x206.44
284	Revere—Ellis ave. and 72nd st.....	311.7x125 and 139x97.....
285	Rills, Jacob A.—Throop and Lytle sts.....	270x206

PROPERTY, JUNE 30, 1914.

Cost of Land.	Cost of Bldgs.	Cost of Betterments.	Cost of Equipment and Furniture.	Total Cost of Land, Bldgs., Betterments and Furniture.	Date of Erection.	Line No.
39,448.00	174,200.00	8,448.00	4,009.00	202,758.00	1906	227
41,342.00	98,999.00	10,905.00	2,901.00	149,047.00	1882-1885-1913	228
63,616.00	217,760.00	13,046.00	4,972.00	299,394.00	1907	229
38,816.00	77,425.00	8,793.00	3,172.00	146,206.00	1896	230
14,088.00	174,448.00	6,838.00	8,489.00	203,863.00	1904-1912	231
60,020.00	75,625.00	20,581.00	2,820.00	159,046.00	1856-1875	232
25,698.00	92,555.00	8,773.00	8,587.00	130,613.00	1884-1898	233
14,719.00	170,681.00	7,847.00	4,475.00	197,672.00	1911	234
8,579.00	68,000.00	12,505.00	8,000.00	92,084.00	1890	235
8,955.00	61,440.00	14,995.00	2,422.00	87,812.00	1889	236
29,398.00	90,583.00	16,954.00	3,650.00	140,445.00	1881-1896	237
8,190.00	108,275.00	8,946.00	4,126.00	189,537.00	1906	238
23,245.00	78,273.00	13,051.00	3,000.00	112,549.00	1895	239
65,009.00	195,067.00	8,295.00	5,809.00	274,200.00	1886-1911	240
46,404.00	74,655.00	11,715.00	3,151.00	135,925.00	1894-98	241
	11,000.00	878.00	600.00	11,978.00	1898	242
13,658.00	79,855.00	11,808.00	8,050.00	108,366.00	1896	243
3,310.00	5,450.00	858.00	450.00	9,568.00	1885	244
75,640.00	108,617.00	7,880.00	3,785.00	255,872.00	1893-1912	245
14,747.00	92,530.00	25,338.00	4,048.00	136,663.00	1858-1895	246
42,640.00	153,489.00	2,921.00	4,736.00	203,786.00	1896-1905	247
	63,009.00	Uncompleted		63,009.00		248
2,082.00	2,450.00	300.00	300.00	5,082.00	1883	249
18,986.00	257,159.00	4,010.00	8,166.00	288,271.00	1910	250
3,001.00	13,100.00	623.00	751.00	17,475.00		251
2,101.00	10,415.00	805.00	700.00	13,521.00		252
500.00	1,225.00	208.00	125.00	2,053.00	1883	253
41,942.00	125,235.00	2,846.00	2,100.00	172,123.00	1908	254
22,375.00	67,950.00	17,192.00	2,700.00	110,217.00	1884	255
23,488.00	137,265.00	2,262.00	1,951.00	164,936.00	1907	256
	71,977.00			71,977.00		257
64,916.00	211,827.00	14,007.00	5,101.00	295,851.00	1879-1893	258
37,734.00	835,025.00	29,336.00	13,249.00	465,364.00	1902	259
53,034.00	173,280.00	3,001.00	4,176.00	233,491.00	1911	260
32,988.00	28,500.00	5,411.00	1,851.00	68,200.00	1889	261
15,347.00	160,799.00	Uncompleted		176,146.00		262
5,000.00	6,500.00		750.00	12,250.00	1892	263
48,090.00	49,850.00	10,109.00	1,800.00	109,849.00	1888-1904	264
27,500.00	58,090.00	7,465.00	2,700.00	95,755.00	1895	265
64,013.00	739.00	Uncompleted		64,752.00		266
20,839.00	196,208.00	1,986.00	4,051.00	219,584.00	1907	267
33,197.00	181,415.00	11,618.00	4,500.00	180,730.00	1874-1896-1903	268
16,023.00	85,845.00	619.00	2,161.00	104,268.00	1903	269
9,540.00	82,310.00	1,616.00	1,651.00	95,117.00	1905	270
18,000.00	90,915.00	14,828.00	3,904.00	127,647.00	1881-1900	271
19,782.00	62,890.00	6,917.00	2,700.00	92,289.00	1896	272
14,830.00	222,835.00	5,627.00	4,084.00	247,346.00	1907	273
2,500.00	6,400.00	3,730.00	600.00	13,280.00	1870	274
29,497.00	224,816.00	3,502.00	6,686.00	264,501.00	1883-1910	275
1,000.00	250.00		150.00	1,400.00	1683	276
39,142.00	94,827.00	8,298.00	3,250.00	144,912.00	1893	277
	144,323.00	Uncompleted		144,323.00		278
19,401.00	174,568.00	14,476.00	9,346.00	317,786.00	1894-1914	279
30,000.00	55,825.00	5,731.00	2,400.00	73,506.00	1857-1894	280
5,000.00	17,000.00	2,114.00	600.00	24,714.00	1889	281
22,341.00	61,187.00	30,106.00	8,218.00	186,862.00	1879-1886	282
16,689.00	147,809.00	Uncompleted		161,448.00		283
17,089.00	84,585.00	5,726.00	1,969.00	109,319.00	1906	284
119,189.00				119,189.00		285

STATEMENT OF SCHOOLS

BUREAU OF AUDIT—1914.

Line No.	SCHOOL AND LOCATION.	SIZE OF LAND.
286	Rogers—W. 13th st. and Throop st.....	264x193
287	Ryder (new)—E. 88th st. and Lowe ave.....	850x265.2
288	Ryerson—W. Huron st. and N. Ridgeway ave.....	567x125.38 and 184x141.37.....
289	Ryerson Addition.....	.....
290	Sabin—Hirsch and Leavitt sts.....	343.5x264
291	Sawyer Avenue—Sawyer ave. and W. 53rd st.....	249.65x126.1
292	Sawyer Avenue Branch—Archer Ave and 48th st....	210x143.6
293	Scammon—S. Morgan and W. Monroe sts.....	150x118
294	Scanlan—La Fayette ave. and 116th st.....	392x261
295	Scanlan Addition.....	.....
296	Schiller—Vedder and N. Halsted sts.....	243.29x199.5
297	Schley—N. Oakley and Potomac aves.....	360x125.3
298	Schnelder—Hoyne ave. and Wellington st.....	425x124.73
299	Scott—Washington ave. and E. 64th st....	352x190
300	Seward—W. 46th st. and S. Wood st.....	298.5x265.4
301	Seward Addition.....	.....
302	Sexton, Austin Oliver—60th st. and Champlain ave..	256.8x263
303	Sexton James A.—Wells and Wendell sts.....	219.61x106
304	Shakespeare—Greenwood ave. and 46th st.....	187.36x185
305	Sheldon—N. State and Elm st.....	200x150
306	Shepard—Francisco and Fillmore aves.....	319.1x267.4
307	Sheridan, Mark—Wallace st. and W. 27th st.....	265.9x192
308	Sheridan, Phil—Escanaba ave. and 90th st.....	430x139.5
309	Sheridan, Phil Branch—E. 93rd st. and Houston ave.	171.8x140
310	Sherman—S. Morgan st. and W. 51st st.....	300x124.8
311	Sherwood—W. 57th st. and Princeton ave.....	261.4x156.1.....
312	Shields—W. 43rd st. and Tallman ave.....	268.8x242.....
313	Sixty-second Place (W.)—W. 62nd pl. and S. Ham- lin ave.....	203.5x124.8
314	Sixty-second Place (W.) Branch—83rd st. and S. Hamlin ave.....	298.56x125.8
315	Skinner—Aberdeen st. and Jackson blvd.....	189x145
316	Smyth—W. 13th st. and Blue Island ave.....	348x107
317	S. Deering—Calhoun ave. and 107th st.....	200x125
318	Spalding—Park ave. and S. Paulina st.....	240x131.4
319	Spencer—Park ave. and S. 50th ave.....	265x180
320	Spry—W. 24th st. and S. Sacramento ave.....	461.5x184.3
321	Stewart—Kenmore ave. and Wilson ave.....	400x143
322	Stowe—Ballou st. and Wabansla ave.....	247.2x177.....
323	Sullivan—83rd st. and Houston ave.....	265.52x198.....
324	Sumner—S. 43rd and Colorado aves.....	377.8x125.82
325	Supply Department—S. Robey and Polk st.....	275x114.23
326	Swift—Winthrop and Ardmore aves.....	635.9x150
327	Swift Addition.....	.....
328	Swing—String and W. 16th st.....	219.9x212.85
329	Talcott—N. Lincoln and Erie sts.....	312x123.7 and 141.7x102.....
330	Taylor—E. 99th st. and Avenue J.....	311.7x125
331	Tennyson—Fulton st. and California ave.....	260.6x150
332	Thomas—High st. and Belden ave.....	264.25x128
333	Thorp, J. N.—Superior ave. and 89th st.....	230x140 and 160x139.....
334	Thorp, O. A.—Foster and California aves.....	353.96x300
335	Throop—Throop st. and W. 18th st.....	198x125
336	Tilden—Lake st. and Elizabeth st.....	256.6x164.75
337	Tilton—S. 42nd ave. and Park ave.....	350x217
338	Trumbull—N. Ashland and Farragut aves.....	266.7x197.2 and 125.46x195.8.....
339	Trumbull Branch—Foster and N. Ashland ave.....	268.5x84.04.....
340	University Avenue School—Lexington ave. and E. 91st st.....	250x124.3
341	University Avenue Branch No. 1—Burnside and Champlain ave.....	123.87x105.66
342	University Avenue Branch No. 2—94th and State st.	170x100
343	Vandervoel—95th and Prospect ave.....	337.5x219.52
344	Van Vliet—Wentworth and W. 108th st.....	443x125 and 140.9x121.3.....
345	Von Humboldt—Hirsch and Rockwell st.....	304.9x123 and 179.9x141.....
346	Wadsworth—Lexington ave. and 64th st.....	808.35x150.....
347	Walsh—W. 20th st. and Johnson st.....	208.6x165.6.....

PROPERTY, JUNE 30, 1914.

Cost of Land.	Cost of Bldgs.	Cost of Betterments.	Cost of Equipment and Furniture.	Total Cost of Land, Bldgs., Betterments and Furniture.	Date of Erection.	Line No.
42,482.00	225,512.00	11,902.00	6,720.00	287,678.00	1880-1906	286
14,088.00	112,125.00	20.00	1,171.00	127,404.00	1912	287
20,478.00	71,675.00	9,448.00	2,550.00	104,146.00	.....	288
.....	4,947.00	Uncompleted	.....	4,947.00	.....	289
97,224.00	24,408.00	Uncompleted	.....	121,797.00	.....	290
4,188.00	26,450.00	5,720.00	1,351.00	47,719.00	1901	291
1,000.00	3,700.00	78.00	450.00	6,228.00	1894	292
20,650.00	40,776.00	8,084.00	2,494.00	61,954.00	1890	293
21,838.00	74,005.00	4,546.00	2,700.00	103,109.00	1888-1897	294
.....	145,136.00	.....	.....	145,136.00	.....	295
29,828.00	82,900.00	14,064.00	3,180.00	129,987.00	1878-1898	296
28,873.00	116,000.00	4,086.00	3,450.00	151,459.00	1899	297
18,415.00	77,605.00	6,177.00	2,808.00	105,005.00	1898	298
63,046.00	70,179.00	9,279.00	2,835.00	145,339.00	1898	299
42,729.00	69,120.00	4,012.00	3,301.00	120,152.00	1894	300
.....	122,884.00	Uncompleted	.....	122,884.00	.....	301
79,525.00	55.00	Uncompleted	.....	70,525.00	.....	302
28,700.00	66,099.00	28,061.00	2,689.00	125,509.00	1882-1912	303
17,000.00	77,000.00	6,984.00	3,038.00	104,022.00	1898	304
26,000.00	46,025.00	7,536.00	2,028.00	94,189.00	1874	305
68,029.00	174,543.00	Uncompleted	.....	242,572.00	.....	306
26,890.00	120,650.00	6,798.00	3,384.00	157,722.00	1881-1902	307
29,220.00	111,825.00	23,184.00	3,840.00	167,069.00	1888-1896	308
20,000.00	73,800.00	7,008.00	3,256.00	98,764.00	1876-1898	309
17,730.00	79,610.00	21,115.00	3,371.00	121,826.00	1884-1897	310
10,000.00	108,155.00	12,191.00	4,051.00	134,397.00	1885-1898	311
40,000.00	238,015.00	6,808.00	5,407.00	289,235.00	1902-1910	312
4,128.00	8,875.00	885.00	751.00	14,639.00	1894	313
2,109.00	3,650.00	.....	300.00	6,059.00	1909	314
21,750.00	65,400.00	6,612.00	8,497.00	97,459.00	1899	315
54,500.00	189,920.00	21,155.00	8,700.00	239,375.00	1897-1906	316
4,000.00	21,800.00	4,409.00	1,350.00	31,559.00	1899	317
23,957.00	81,470.00	1,008.00	.....	116,435.00	1907	318
6,409.00	91,565.00	4,721.00	1,800.00	104,495.00	1904	319
49,046.00	116,550.00	4,217.00	4,362.00	164,175.00	1899	320
38,420.00	187,898.00	13,294.00	3,876.00	243,488.00	1909	321
12,786.00	129,880.00	5,425.00	3,124.00	151,145.00	1908	322
7,386.00	119,705.00	15,546.00	4,094.00	146,731.00	1902	323
17,871.00	128,569.00	12,161.00	5,228.00	223,829.00	1894-1912	324
29,512.00	121,791.00	60.00	1,362.00	152,725.00	1914	325
65,561.00	17,765.00	5,486.00	900.00	89,712.00	1898	326
.....	208,421.00	Uncompleted	.....	208,421.00	.....	327
61,786.00	58,920.00	16,875.00	3,319.00	140,900.00	1896	328
26,557.00	164,585.00	10,430.00	4,747.00	216,309.00	1896-1902	329
18,988.00	47,700.00	5,275.00	1,950.00	73,913.00	1881-1894	330
10,107.00	65,900.00	4,168.00	2,850.00	83,025.00	1896	331
28,207.00	52,100.00	6,808.00	2,812.00	90,027.00	1890	332
44,812.00	79,790.00	11,478.00	3,336.00	139,417.00	1898-1896	333
3,581.00	208,005.00	7,229.00	2,957.00	227,782.00	1906-1912	334
6,800.00	85,510.00	19,089.00	2,563.00	77,962.00	1878	335
21,853.00	82,185.00	12,298.00	2,700.00	128,536.00	1886-1897	336
26,082.00	284,509.00	2,872.00	4,578.00	298,130.00	1908	337
28,809.00	286,089.00	754.00	5,496.00	320,188.00	1909-1912	338
2,140.00	.....	.....	.....	2,140.00	Vacant	339
2,912.00	11,487.00	105.00	725.00	15,209.00	1911	340
1,018.00	2,600.00	1,156.00	500.00	5,274.00	1899	341
600.00	400.00	.....	580.00	1,580.00	1876	342
6,373.00	106,304.00	3,055.00	2,871.00	121,243.00	1878-1898	343
6,279.00	178,561.00	16,209.00	5,086.00	206,145.00	1898-1905	344
28,235.00	127,889.00	17,167.00	5,888.00	179,289.00	1895-1898	345
21,122.00	88,809.00	21,978.00	3,901.00	135,910.00	1894-1896	346
28,609.00	117,704.00	28,609.00	4,304.00	180,226.00	1894-1896	347

STATEMENT OF SCHOOL

BUREAU OF AUDIT—1914.

Line No.	SCHOOL AND LOCATION.	SIZE OF LAND.
348	Ward—Shields ave. and W. 27th st.	307.5x132
349	Warren—Central ave. and 92nd st.	450.98x125.06
350	Washburne—W. 14th st. and Jefferson st.	325x173
351	Washington—Morgan st. and Grand ave.	277x116 and 200x138.
352	Waters—Wilson and Campbell ayes.	558.6x206.56
353	Webster—Wentworth and 33rd st.	200x126
354	Wells—Cornelia and N. Ashland ave.	810x180
355	Wentworth—W. 70th st. and S. Sangamon st.	471.67x206
356	West Pullman—Parnell ave. and W. 120th st.	475x123.5
357	Whitney—S. 40th ct. and W. 28th st.	502.77x124.67
358	Whittier—W. 33rd st. and S. Lincoln st.	366x124
359	Wicker Park—Evergreen ave. and N. Hoyne ave.	285.25x168.11 and 173x63.25.
360	Willard—E. 49th st. and St. Lawrence ave.	350x127.96 and 146x134.
361	Worthy—26th st. and California ave.	On City property.
362	Yale—W. 70th st. and Yale ave.	274.05x132 and 150x132.
363	Yates—N. Humboldt st. and Cortlandt st.	325x120.
364	Workshop—Monroe st., near Halsted st.	School Fund land.
365	Workshop Annex—N. Morgan and Erie st.	217x116
366	194 Portable Bldgs. @ 1200 each.	
367	Hoyne—Illinois and Cass sts.	150x109
368	Michigan ave., near 115th st.	Approx. 250x116.2
369	W. Polk st., bet. Halsted and Desplaines.	150x120
370	Wentworth ave. and W. 19th st.	200x124.6
371	Agassiz (old)—Diversey blvd. and Seminary ave.	400x120
372	Austin ave. and N. 50th ave.	175x120
373	Linne Branch No. 1—N. Troy st. and Elston ave.	Irregular—Approx. 130x124.22.
374	Emerald ave. and W. 79th st.	150x144.4
375	Goldsmith—Maxwell and Union ave.	178.75x150.
376	Marsh (old)—Escanaba ave. and 101st st.	208.58x138.5
377	Tilton (old)—W. Lake st. and 44th ave.	228x190
378	93rd st. and Stony Island ave.	150x125
379	Armitage ave. and 48th ave.	225x123
380	Avenue M—E. 97th st.	194.07x124
381	Belmont ave and N. Robey st.	250x125
382	S. Carpenter st. and W. 90th st.	125x100
383	Elizabeth st. and 101st st.	128x44.31
384	Edmonds st., bet. Avondale and Goodman st.	223.3x150
385	Shields (new site)—W. 51st. st. and S. Campbell ave.	283.22x238.3
386	W. 47th pl., near Aberdeen st.	125.9x75
387	Grace st. bet. Central Park and Drake ave.	290.9x267.04
388	Ingleside ave. and E. 57th st.	192x115
389	Jeffrey ave. and 71st st.	297x115.5
390	S. Leavitt and 95th st.	175x175
391	Maplewood ave. and W. 36th st.	142x127
392	Martin st. and 106th st.	123x24
393	Mohawk and Menominee st.	163x119
394	W. 117th st. and S. Morgan st.	243.3x125.27
395	W. 19th st., west of Marshall blvd.	166x115.5
396	W. 92nd st. and Lowe ave.	125x124
397	Nina and Nickerson sts. (site)	325.65x343.75
398	S. Lawndale ave. and W. Polk st.	250.5x162.3
399	Phillip ave. and 92nd st.	201.1x125.59
400	N. 64th, bet. Diversey and Fullerton.	146.52x146.52
401	Wallace and 104th sts.	182x94
402	Warren ave. near Talman ave.	126x95
403	S. Winchester ave. and W. 57th st.	300x264.82
404	Wrightwood and N. 44th ayes.	581.25x206.14
405	Argyle, Sawyer, Ainslie and Spaulding ayes.	596.7x206.4
406	Perry, Bosworth and Albion sts.	599.28x264.7
407	80th and Jeffrey ave.	362.36x206.3
408	Berteau ave. and 53rd st.	606.36x266.74
409	Grace st. and Oakley ave.	355.28x264.4
410	60th st. and Rockwell st.	599x206.36
411	65th st. and Sacramento ave.	598x206.5
412	101st st. and Leavitt st.	590.14x290.16
413	52nd and Rockwell sts.	598.25x206.64
414	Waveland and Rokeby st.	588.87x269.66
Grand Total.....		

PROPERTY, JUNE 30, 1914.

Cost of Land.	Cost of Bldgs.	Cost of Betterments.	Cost of Equipment and Furniture.	Total Cost of Land, Bldgs., Betterments and Furniture.	Date of Erection.	Line No.
19,569.00	72,770.00	5,900.00	3,186.00	101,425.00	1874-1897	348
8,611.00	142,433.00	2,015.00	2,821.00	156,880.00	1907-1913	349
3,922.00	270,502.00	2,806.00	4,578.00	381,808.00	1906-1908	350
5,606.00	216,876.00	4,379.00	4,313.00	312,174.00	1907	351
40,194.00	172,516.00	4,341.00	3,138.00	220,189.00	1911	352
8,000.00	50,435.00	12,423.00	2,401.00	73,259.00	1883	353
14,775.00	130,984.00	18,313.00	4,650.00	168,722.00	1865-1883	354
32,352.00	121,011.00	9,544.00	4,587.00	167,484.00	1880-1893	355
25,617.00	76,375.00	6,114.00	3,591.00	111,727.00	1894-1900	356
19,445.00	166,085.00	12,200.00	4,292.00	201,972.00	1905	357
13,082.00	76,300.00	9,979.00	3,391.00	102,702.00	1893	358
36,656.00	99,340.00	6,738.00	4,225.00	146,959.00	1881-1894	359
62,354.00	82,535.00	8,573.00	8,577.00	157,039.00	1898	360
	89,863.00	12,262.00	12,653.00	114,768.00	1895	361
34,738.00	85,400.00	17,868.00	3,210.00	141,216.00	1887-1894	362
10,997.00	99,330.00	5,395.00	4,088.00	119,760.00	1896	363
	101,151.00	2,332.00	16,401.00	121,884.00		364
21,700.00	57,250.00	9,018.00		77,968.00	1871	365
	232,200.00			232,200.00		366
33,000.00	52,500.00	16,384.00	1,220.00	108,104.00	1885 Leased	367
5,845.00				5,845.00	Leased	368
13,500.00	31,500.00			45,000.00	1871 Leased	369
12,000.00				12,000.00	Leased	370
35,000.00				35,000.00	Vacant	371
5,500.00				5,500.00	Vacant	372
1,100.00	1,750.00	180.00	300.00	3,330.00	1884 Leased	373
5,500.00				5,500.00	1889 Vacant	374
38,806.00	60,795.00	3,055.00	3,300.00	106,916.00	1870-1901 Leased	375
4,000.00	14,000.00	3,087.00	1,200.00	22,287.00	1882-1908 Vacant	376
10,061.00				11,061.00	1874 Vacant	377
1,000.00				1,000.00	Leased	378
4,950.00				4,950.00	Vacant	379
5,000.00				5,000.00	Vacant	380
13,000.00				13,000.00	Vacant	381
2,000.00				2,000.00	Vacant	382
400.00				400.00	Vacant	383
3,000.00				3,000.00	Vacant	384
9,980.00				9,980.00	Vacant	385
3,100.00				3,100.00	Vacant	386
9,608.00				9,608.00	Vacant	387
19,200.00				19,200.00	Vacant	388
3,400.00				3,400.00	Vacant	389
1,500.00				1,500.00	Vacant	390
1,425.00				1,425.00		391
150.00				150.00	Vacant	392
33,743.00				33,743.00	Vacant	393
3,000.00				3,000.00	Vacant	394
6,000.00				6,000.00	Vacant	395
1,800.00				1,800.00	Vacant	396
13,208.00	3,133.00	Uncompleted		16,401.00		397
21,103.00				21,103.00	Vacant	398
5,800.00				5,800.00	Vacant	399
150.00				150.00	Vacant	400
800.00				800.00	Vacant	401
4,800.00				4,800.00	Leased	402
13,614.00				13,614.00	Vacant	403
20,656.00				20,656.00	Vacant	404
43,590.00				43,590.00	Vacant	405
75,540.00				75,540.00	Vacant	406
18,272.00				18,272.00	Vacant	407
16,717.00				16,717.00	Vacant	408
43,162.00				43,162.00	Vacant	409
30,153.00				30,153.00	Vacant	410
15,628.00				15,628.00	Vacant	411
10,127.00				10,127.00	Vacant	412
13,119.00				13,119.00	Vacant	413
287.00	Donated by John V. Le Moyne.....			287.00	Vacant	414
\$ 10,457,079.00	\$ 42,659,490.00	\$ 3,052,332.00	\$ 1,643,177.00	\$ 57,812,078.00		

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GYMNASIUM--CARTER H. HARRISON TECHNICAL HIGH SCHOOL.
Marshall and W. Twenty-fourth Boulevards, Chicago.

Report of the Superintendent of Schools

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WOODWORKING SHOP—CARTER H. HARRISON TECHNICAL, HIGH SCHOOL.
Marshall and W. Twenty-fourth Boulevards, Chicago.

REPORT OF THE SUPERINTENDENT OF SCHOOLS.

Statistical Tables for the Year 1913-14 Are Not Included in This Edition.

To the Board of Education of the City of Chicago:

In accordance with Section Thirty-two, Rules of the Board of Education, I submit the Sixtieth Annual Report of the Superintendent of Schools on conditions in the Public Schools of Chicago during the year ending June 30, 1914.

IN MEMORIAM

During the present year twenty-nine who were with us a year ago, six who had retired from active service in the schools but were gratefully remembered in the roll of annuitants, and one who from 1863 to 1878 led the educational forces of the city, have all passed from life and endeavor on earth. Some dropped suddenly in their school-rooms, others after a brief illness were vanquished in the struggle, a few calmly yet bravely awaited the day when suffering should cease, and one in the fulness of health went down in a ship at sea.

The name at the head of the roll is that of one who had not been in active service in recent years. Mr. Pickard came to Chicago from the position of State Superintendent of Instruction in Wisconsin; upon leaving us, he became President of the State University of Iowa. During his term of fifteen years the schools attained a high level in training and organization. On every hand, however, school activities conveyed slight suggestion of social processes. No one strove more persistently than he to humanize the tendency of instruction and effort throughout the system, but the whole country was under the spell of the fads of the day—Marks and Written Examinations. He, first of all, realized the force

of the storm brewing that resulted in the abolition of corporal punishment in the public schools.

In co-operation with the then superintendents of St. Louis, Cleveland, Cincinnati, and Detroit, he standardized the administration of the course of study, and reorganized education statistics for the five cities. To the close of his life his interest in the schools of Chicago was unabated, and his analyses of the annual reports of the Board of Education of Chicago showed the same clear, unerring judgment that had characterized him as superintendent.

The Examiner, Austin C. Rishel, had been a high school teacher and a principal in the schools of Chicago. He was a gentleman in the full sense of the word. No person who entered a request or a protest concerning an examination was ever treated slightly or haughtily by him. Notwithstanding this courteous attitude toward all people, he never yielded one jot or tittle in maintaining his integrity as examiner. It would be difficult for one who knows nothing of the innuendoes, charges, offers of favors, and threats which are sometimes made against and to an examiner, to appreciate to the full what courage is demanded in maintaining that integrity.

The roll contains the names of twenty-eight who were actively engaged in the class-room. One was a teacher of little ones in the kindergarten, twenty-two were teachers in the grades who had helped equip hundreds, even thousands, for their places as workers in the different fields of labor and social endeavor, one was a teacher who for many years had as head assistant made the final essay of an elementary school to send out boys and girls fortified by truth and intelligence for life's battles, three were high school teachers teaching those approaching manhood and womanhood, and one was an instructor in science.

"As thrills of long-hushed tone
Live in the viol, so our souls grow fine
With keen vibrations from the touch divine
Of noble natures gone."

THE ROLL

1913-1914

FORMER SUPERINTENDENT OF SCHOOLS

Pickard, Josiah Little.....March 27, 1914

EXAMINER

Rishel, Austin O.....Oct. 24, 1913

INSTRUCTOR, CHICAGO NORMAL COLLEGE

Cole, Aaron H.....Jan. 1, 1914

TEACHERS, HIGH SCHOOLS

Jacobson, KatherineHyde ParkDec. 8, 1913
Lloyd, HelenHyde ParkNov. 16, 1913
Lowrance, Eva W.....AustinJan. 15, 1914

HEAD ASSISTANT

Ranney, Harriet A.....HayesFeb. 11, 1914

TEACHERS, ELEMENTARY SCHOOLS

Brown, MaryGoudySept. 30, 1913
Cady, Jennie L.....IrvingNov. 15, 1913
Calvin, OkaEmersonFeb. 10, 1914
Cary, Phoebe J.....MoosApril 7, 1914
Cashin, AliceBlaineNov. 22, 1913
Forbes, AnniePeabodyAug. 5, 1913
Gowell, Lizzie Y.....KomenskySept. 1, 1913
Gowran, Lena M.....ChaseJune 24, 1913
Holland, Harriet A.....ChaseNov. 2, 1913
Kipp, Jeannie V.....AvondaleDec. 30, 1913
Lafont, Adeline K.....YatesAug. 8, 1913
Lonergan, ClaraSumnerJune 20, 1914
McGlinn, Lillian J.....FullerFeb. 1, 1914
Pabst, Lilla Young.....BeaubienMay 24, 1914
Penoyer, MarcellaSpencerFeb. 23, 1914
Riordan, StellaDoolittleAug. 17, 1913
Root, Elizabeth B.....EriessonFeb. 27, 1914
Schoenstedt, Carrie M...ClarkeFeb. 14, 1914
Spooner, Mary L.Haines PracticeSept. 6, 1913
St.Lawrence, Margaret O..HarvardNov. 10, 1913
Taylor, Nellie M.....FultonSept. 15, 1913
Thompson, Olive M.....MitchellJuly 9, 1913

TEACHER, KINDERGARTEN

Parrey, CarolynFosterNov. 21, 1913

ANNUITANTS

Bowen, William J. K....ParentalDec. 1, 1913
Greenleaf, Emma M....HarrisonJuly 24, 1913
Leeper, MargaretJirkaNov. 12, 1913
Malony, Elizabeth M. F..Calumet HighJan. 2, 1914
Mather, Elizabeth B....KingAug. 31, 1913
Meade, Lizzie Q.....HamlineApril 21, 1914

Official Staff of Superintendent of Schools.

The official staff of the superintendent of schools consists of two assistant superintendents, twelve district superintendents, one examiner, one director, and seven supervisors. The duties of the different groups are sharply defined, but within the groups, though the duties are defined, their administration depends in large measure on the personality of the administrator.

The assistant or office superintendents have charge of affairs extending throughout the entire system. The first assistant has an oversight of all orders and requests for supplementary, library, and fund books, educational supplies, globes and maps, in short of all material purchased from the appropriation for educational equipment and supplies. The supervision of vacation schools and of social centers was added in order that the first assistant might continue to maintain direct connection with some forms of educational movements. This addition has, however, proved onerous, and at the request of the first assistant superintendent, the election of a supervisor of social centers will be recommended. The vacation schools have been, in the main, conducted by a principal, who has received extra compensation, and who, having been selected by the first assistant, has been in harmony with his aims and methods. The second assistant superintendent has charge of the assignment and transfer of regular and substitute teachers. That this official should not be wholly separated from teaching, the supervision of continuation work for girls was added to the above charge. The duties of the assistant superintendents should command promptness in deciding upon all requests, clearness in judging wherein the rules of the Board of Education or the customs of the Education Department apply to requests or orders out of the ordinary, and an impersonal attitude toward the support back of requests, whether it be rights or political influence.

Variations in aim, in method, and in interpretation of

personal responsibility for an intelligent and sympathetic construction of present-day educational and social endeavor in all schools are noticeable in the group of district superintendents. This is not strange, since the members are selected because of general excellence in conducting a school, or for other reasons. A board of superintendents so chosen has specific types of practical experience. In these types and the means by which they were moulded into their specific forms, originates a diversity in superintending by the members. The dulling, depressing influence of inertia in the offices of too many school principals tests those types and means to the uttermost. So pronounced is this discouraging influence upon a superintendent or district superintendent that sometimes a school is left to mark time as a striking example of the form without the spirit of traditional education. The only power that can change inertness in a school principal to lasting, worthy activity is the recognition by that principal of responsibility throughout the school for a method that sees the life of the community, the life of the child, in brief, the universal, in the progressive movements of the minds of the individual children as they reveal themselves in the exercise of the ability to initiate and to complete. It rests with the district superintendent and finally with the superintendent to arouse an inert principal to such recognition, or officially to acknowledge defeat. If ten per cent of the schools in a town or district are dulled, stupefied, wasting the lives of the children, the conclusion is inevitable that something is wrong at the top; the top including not only the principal, but the superintendent in charge. The fault may lie in the absolute self-assurance of the principals who in childhood idealized a principal as one who with "thumbs up" or "thumbs down" holds in check all who come into any form of official relations with that principal; it may lie in the incapacity of the superintendent in charge for leadership in educational thought; it may lie in a general acceptance of the theory that many schools being good, surely some poor ones may be tolerated; finally, it may originate

in the unexpressed fear that the outcome of efforts to improve may under our popular government make the one striving for better things unpopular, and so effect an unintended change. When the organization of systems of schools was in the incipient stage, when methods and values were individual with principals and superintendents, it was unavoidable that the only standards recognized in a system were those set by principals and superintendents. Although those standards transcend the standards of the people, yet it is from the people that the push comes today for a better type, a push which calls for an overhauling and a reconstruction of the results demanded of those who have more or less responsibility as executive or administrative officials.

Mr. William H. Campbell, who was superintendent of the schools of Joliet, Illinois, before coming to Chicago, and who at the time of his appointment was principal of a large school in Chicago, brings experience and scholarship to the continuance of the work in the Bureau of Examinations.

In July, Miss Mary S. Snow resigned the supervisorship of the Department of Household Arts. She has undertaken a valuable piece of work for the Intercollegiate Bureau of Occupations. But few are qualified by training and interest to conduct that survey, and therefore, although Chicago lost in Miss Snow a talented specialist in Household Arts, yet the superintendent believes the work for the Bureau of Occupations will be more far-reaching in its influence on the education of girls and young women than the department of household arts in a single city could be.

Miss Ida M. Cook, principal of the Graham School, was elected Supervisor of Household Arts to succeed Miss Snow. Through her experience at the head of several different schools Miss Cook has an understanding of teachers and of the aims of household arts that insure the successful conduct of the department.

Mr. William Bachrach has filled effectively the position to which he was elected in June, 1913—Supervisor of Commercial Education in High Schools. With his usual persist-

ence he has striven unceasingly to raise the commercial work to a high level in every class that he supervises.

The remaining members of the staff are specialists. Some of them have wrought a transformation in the results of their departments. One danger always threatens schools supervised in different subjects by specialists, each of which will be judged by the inferiority or superiority of the results achieved by the supervisor. Grade teachers have asked that the directions of leaflets, issued for a given period of time by the supervisors, be all revised by the superintendent at the same time, in order that the amount of special work shall be justly estimated and a proper ratio be maintained between regular and special subjects. This request is an attempt to meet the danger referred to above.

School Faculty.

Every school, whether high or elementary, has a principal and a corps of teachers. The principal's position is administrative, executive, and instructional; the teacher's, executive, instructional, and social. Out of the custom that gave to principals and superintendents the right to set standards, there has been evolved an ideal of administrative power as that which embodies the right to set all standards for everybody coming within its jurisdiction. This ideal was admissible in the formative stage of a great governmental institution, before an analysis of Democracy in that institution was undertaken. That stage has been passed. We are now face to face with the fact that a Democracy whose school system lacks confidence in the ability of the teachers to be active participants in planning its aims and methods is a logical contradiction of itself. A school principal, talking about the desirability of constructing larger school buildings, said "There should be forty-five divisions in a school. That would mean forty-five teachers for the principal to direct, just as each teacher has forty-five children to teach." This was the reasoning of a member of the ruling class in an Aristocracy. That teachers should be active in planning the courses of study or the improvement of relaxation periods, was not written in the books

of that principal; neither was the power of initiative written in the categories of school children's minds, as he would list them.

On the other hand, the long-accepted definition of the social duties of teachers—the development^a in their immature pupils of a spirit contented and willing, regardless of their desires and their intelligences—has tended to create a feeling of unrest in teachers when called upon to initiate, to construct educational plans outside of their individual class-rooms. Sometimes they, like principals, superintendents, and Board Members, have feared anarchy as a resultant of the individual ideals clashing in the children upon transference from one teacher to another. That is exactly what does result under conditions in which teachers work out their individual preferences under regulation by the administrative officials. It is not a good-natured patting on the back, nor words of commendation given by a superior being to an inferior being that will make for a social harmony in a school or a system of schools. What must come, and is coming rapidly in the more progressive systems, is the contribution of the successful experience, the theories, and the doubts of teachers, in frank, open discussion in councils organized for freedom of thought and speech. Why talk about the public school as an indispensable requisite of a Democracy and then conduct it as a prop of an Aristocracy!

Semester Division of the Year.

The calendar year is divided into three terms, one of sixteen weeks beginning January 1st, one of eight weeks beginning May 1st, and one of sixteen weeks beginning September 1st. The scholastic year is divided into two semesters (school half-years) of five months each, the first beginning September 1st, the second beginning February 1st. The semester plan was adopted by my predecessor. It serves the purpose admirably of making graduation from the elementary schools and entrance into the high school possible for those who enter during the school year or are cut off from attendance two or three months of the year. It has been slow work to convince some principals that if the brilliant and the dull, the healthy and the delicate, the regular attendant

and the absentee for two or three months, cannot all move through a year's course in exactly the same time, it does not follow that the brilliant must take one year for a year's work and the slow must take two years.

In order that a child shall remain with one teacher a year, and that the school be not rent in twain at the end of January and of June, the semester plan necessitates two divisions of the school under the same roof; one set of teachers having the mid-year classes (those promoted January 31) and one set having the end-year classes (those promoted June 30). This organization makes it possible to transfer brilliant children who can accomplish a stated amount of work in less time than the class requires, to a division in the semester in advance of the one to which the class belongs. The children so transferred change their teachers within the year, but they do not suffer from the change as would those who are less active mentally.

At the close of the first semester of the present year, January 31, 1914, 78,305 pupils were promoted in the grades below the eighth; 5,408 were graduated from the eighth grade, 3,732 of whom entered the high schools February 2. At the end of January there were 691 from the four-year courses and 222 from the two-year vocational courses, making 913 graduated from the high schools. In all, 6,321 children were promoted from the elementary and high schools on the midyear plan, not counting the promotions within the schools. And yet there are principals who consider the promotions of those 6,321 children inconsequential in comparison with the additional exertion demanded of the administrator, the principal, in conducting the graduation exercises, and in deciding upon the transfers in that division of the school organized for midyear entrance and promotion. Is this attitude another phase of the generally recognized disregard for life in America, manifesting itself in disregard for mental life by the school administration? The mental life of many a child would be doomed to be spent on a low level, because of a condition in the school which by reason of delay would deprive it of the light and interest which come through promotion in normal activity.

Notwithstanding the midyear gains in advancement accruing to those whose birthday does not fall on a date near September first, or to those who can do two years' work in one and one-half years, or to those who through illness or other troubles in the family have dropped out of the running in the end-year class, there are still too many overgrown girls and boys in the eighth grade classes, particularly in the native American districts. Though it is true that the average age of classes graduating from the elementary schools has dropped a year, statistics show the reduction to be due to the relative increase of those who are twelve, thirteen, and fourteen years of age, and not to the elimination of those who are fifteen and sixteen years old. The large number of boys and girls of American parentage in the eighth grade who have spent nine years in the elementary schools, is due to their devotion to the many outside attractions which monopolize their thought and strength; and to the inability of the American parent to curtail the pleasures of the child, or to enforce attention to duties. When the new course of study with its time for preparation of lessons in school hours is well established, there will be opportunity for securing definite data on home versus school study, the influence of the parent in securing concentration compared with that of the teacher, and the cause of the long delay in the grades of many children of American parentage. Certainly something is wrong when elementary schools can present a dozen or more changed voices in the eighth grade chorus. These boys have been taught arithmetic daily, from the second grade through all the grades, and reading, composition, and penmanship from the first grade without cessation. The teachers have struggled with them, and yet it has taken nine years to acquire a fair degree of power in those arts. Part of the difficulty is in the home training and part in the method of the school. Recently a school principal expressed the fear that before many moons have passed, the word *Retarded* will confront principals wherever they may chance to glance: *Retarded without cause* should be the Nemesis. No one expects all children to make the year's work in one year. A standard of efficiency must be maintained. The present standard will be raised if

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children of fair ability do not acquire the habit of loitering in the grades.

One possibility of error underlies the arrangement of the course of study by semesters; the stretches of time and of knowledge for a single semester are so limited that the ability of a boy or girl to do the work of the next semester might not command the attention of a teacher who is engrossed in instructing her pupils and in testing their thinking powers in the daily lessons. In the early graded courses there were ten grades, and promotion from one grade to the next higher was dependent upon success in an examination given by the principal. It took less than twenty years to demonstrate the hindrances met in covering a course with "ten hurdles to jump". A change was made to eight grades, but the desirability of midyear promotions, of reducing within reasonable limits the time of review for one who had failed on a small piece of the grade work, and on account of transfers between schools of making the work to be accomplished in a given part of a grade the same in all schools led to indicating the eight grades in half years. We now have in our school sixteen grades, with the hurdles set by the teacher instead of the principal. In some schools both the familiarity of the principals with the work of the children, and the open-mindedness of the teachers, combine to make the many divisions what they were intended to be—helps to a common classification within a great school system. It remains true, however, that in some schools the exceptional twenty per cent of the membership cannot progress with greater rapidity than the eighty per cent whose ability averages a semester of the grade in five months as its rate of speed year in and year out. Some intelligent parents have withdrawn their children from the seventh and eighth grades of the public school, for the reason, as they state it, that the boy or the girl cannot afford to spend those important years of the school life in perfecting the ability to read, write, spell, and cipher, all of which should come with study of advanced subjects that discipline and inform the mind. Two years ago the head of a department of education in a college promoted the seventh grade class in its elementary school to the ninth grade in its high

school, simply expunging much of the eighth grade and transferring what remained to the high school. The plan has passed the experimental stage and become the settled course in that school.

Junior High Schools.

Closely related to the question of the value of the eighth grade is the plan of the Junior High School, which has been introduced into a few cities.

The question of the length in time of the elementary, the high, and the college courses has been under discussion at least twenty years. At first the conditions of the problem seemed to be largely mathematical with an admixture of physiological and psychological facts. The suggestions for readjustment came from the colleges. It is probable that the heads of upper schools were influenced to a considerable degree, though unconsciously, by the desire for larger membership, while on the other hand the high and elementary schools in large cities generally have more children to a teacher than is compatible with the best education conditions. The age of entering students and the slight amount of knowledge they possess at that age have also attracted the attention of college presidents. Theory and experiment have been brought to bear on the solution of the question of relative length, and they bring the same general result as that given in the early discussion. College men would eliminate grades seven and eight from the elementary course and make of the remaining six grades a variety of the old-fashioned dame school. Then they would gather the present grades seven and eight of the elementary grades and nine and ten of the high school into a junior high school, introducing the term "high" to pacify the first and second year high school pupils for the loss of full high school ranking. A senior high school consisting of the present third and fourth years of the high and the first two years of the present college course would be established.

That a complex situation confronts us is evident, and no simple factor is that of the business interests when represented by the self-made man, for the self-made man believes that the

elementary school is designed for a single purpose. His conception of that school is identical with the philosopher's conception of design before the day of the theory of evolution.

Boys and girls cannot acquire by the close of the sixth grade sufficient power to meet satisfactorily the requirements of the positions into which they will strive to enter upon leaving school. It is not repeating and reviewing that make one proficient; it is the attack made in accord with the period of growth, development, that brings greater power and efficiency. The need of a junior high school is not urgent. There is, however, pressing necessity for a readjustment, a re-organization of the work in the grammar grades and first and possibly second years of the high school.

The greatest drawback to the successful solution of this problem is the failure of principals and upper grammar grade teachers to see it, to feel the pressure of present conditions intellectually. On the other hand the method of school management in the seventh and eighth grades is admirable. The readiness, the willingness, with which the pupils respond to their teachers gives testimony to a social spirit that promises much for the future of the boys and girls.

Upon passing to a consideration of the proposed constituency of the third and fourth years of the junior high school, one wonders where the teachers are to come from. The lack of training of high school teachers in the art of teaching is most apparent in the lower classes, because, unfortunately, as a rule teachers are assigned to the higher classes as they acquire control of their subjects for instruction and their subjects of instruction. An advanced school for the special training of high school teachers is a desideratum in Chicago. Our normal college is developed for professionally educating elementary teachers. The prospective high school teacher needs a different kind of training—training with a scholar in the special subject and with a student of the genuine problem of education. College professors are wedded, as a rule, to the lecture method, a method which is destructive to mental activity in boys and girls, but which is nevertheless imitated in teaching by recent college graduates.

Some graduates never recover themselves when they become teachers. A professor brought to this country and assigned to a high position in a university because of his world-wide fame for superiority in his specialty, says that the marked weakness of American college students is their inability to raise or answer questions while the lecture is being given. To what soporific influence were those boys and girls subjected while in the high school?

An argument advanced in favor of a junior high school is to the effect that it will be less expensive than a full-fledged high school. Why? Are the cheaper, the less efficient teachers to be employed in them? Are the classes to be larger?

Without doubt upper elementary and lower high school courses should be reorganized; the high school should so arrange its upper courses that, with the change in the lower courses, it will be possible to add to the high school the junior college, having for students young men and women no older than the majority of those now graduating from the high school. It is not the introduction of a forcing process that we need, but a better insight, a clearer vision of education for young people between the ages of twelve and eighteen.

School Grounds.

In 1913, the Committee on Buildings and Grounds decided not to set iron fences about the school grounds, but to enclose them with shrubbery, thus increasing the attractiveness, while marking off boundaries. It was further decided to have a new bureau in the department of education, and to place at its head a Director of School Grounds, whose duties should not be circumscribed by the laying out of the grounds, but should extend to the instruction of the older pupils in the preparation for the life and growth of the shrubs and trees set out, and also in their care after the director shall have gone to other schools. The preparation of the grounds for any form of plant life has been exceedingly slow thus far. The generous policy adopted by the Board in reference

to playgrounds a few years ago has given many large sites with new school buildings, surrounded by remains of old buildings. The bare cost of clearing and leveling sites like those of the Ray, the Swift, the McAllister, the Carter, and the Agassiz, mounts into thousands of dollars, not including the planting of shrubbery or the setting of any other style of fence, all of which makes a heavy drain on the appropriation that is not equal to orders and recommendations already adopted by the Board. The desirability of a careful survey of the needs of the schools and of the appropriation for them is undoubted, but the fact remains true that there are not sufficient funds for the new buildings needed and the proper care of the grounds. So the new bureau established in the department of education is unable to accomplish one-third the improvements that its energetic head, Mr. Carl Alfred Meltzer, would bring to pass if there were means with which to employ men and teams, and to purchase shrubs and trees.

In addition to the financial handicap, there is a difference of opinion as to the meaning of improvement and beautification of school grounds. The fear is frequently expressed that the space for play will be curtailed by the planting of anything that grows. When one observes the small back yards connected with apartment houses, the size of the school playground becomes an important consideration in the development not only of health, but of muscularity and sturdiness. Slowly but steadily the custom of taking classes in gymnastics into the open air for tactics, games, and calisthenics is increasing. The schools that have a municipal playground adjoining or in the school yard are favored with apparatus out of doors and with a competent teacher of gymnastics, who is present when the children are having recesses. The day will come when, like the high school, each elementary school will have one or more teachers of physical education devoting the entire time to the one school. Then, with the playgrounds made not only presentable but attractive, physical education will be more than exercises in enclosed gymnasiums. All this waits, however, on an increase of

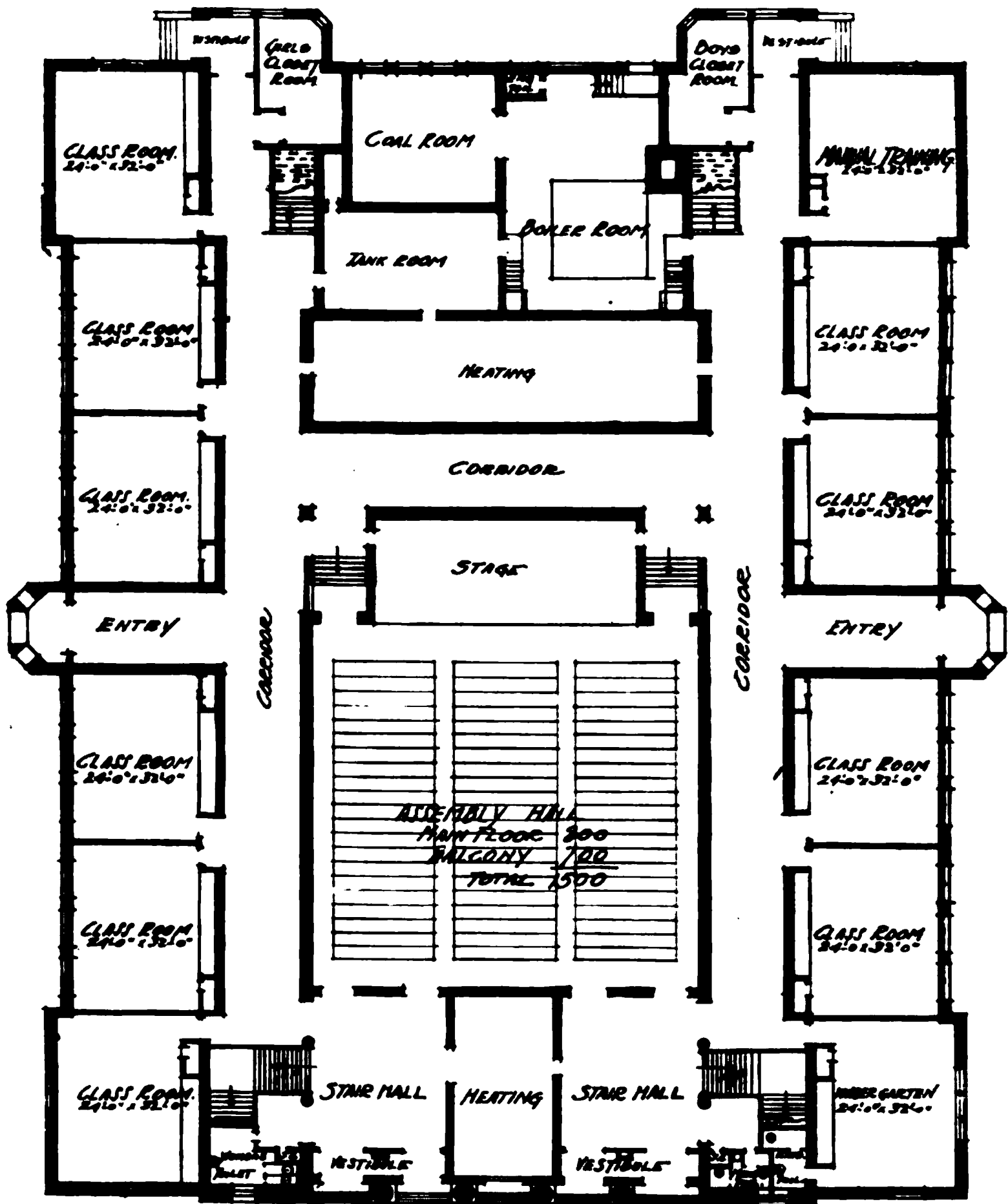
funds with which to improve and beautify the grounds acquired by the Board for the use of the school.

What is beautification of school grounds? Some define it as the leveling of grounds and setting of a border or fence; others define it as the creation of a suitable playground, bordered with shrubbery and trees and when desirable varied by changes in levels, that will make the architecture of the school building more striking, and will give something of a picturesque effect to those grounds in which thousands of children will spend many impressionable years in joyous sport. The general interest of citizens and tax-payers in the working out of plans for the improvement and beautification of school grounds is indicative of a civic spirit that is becoming characteristic of Chicago. It is hoped that the definition given by the second class of interested citizens will be generally accepted, and that the artistic plans of the director will be recognized as having a far-reaching influence upon the future citizens and the future of Chicago Beautiful.

Modern School Buildings.

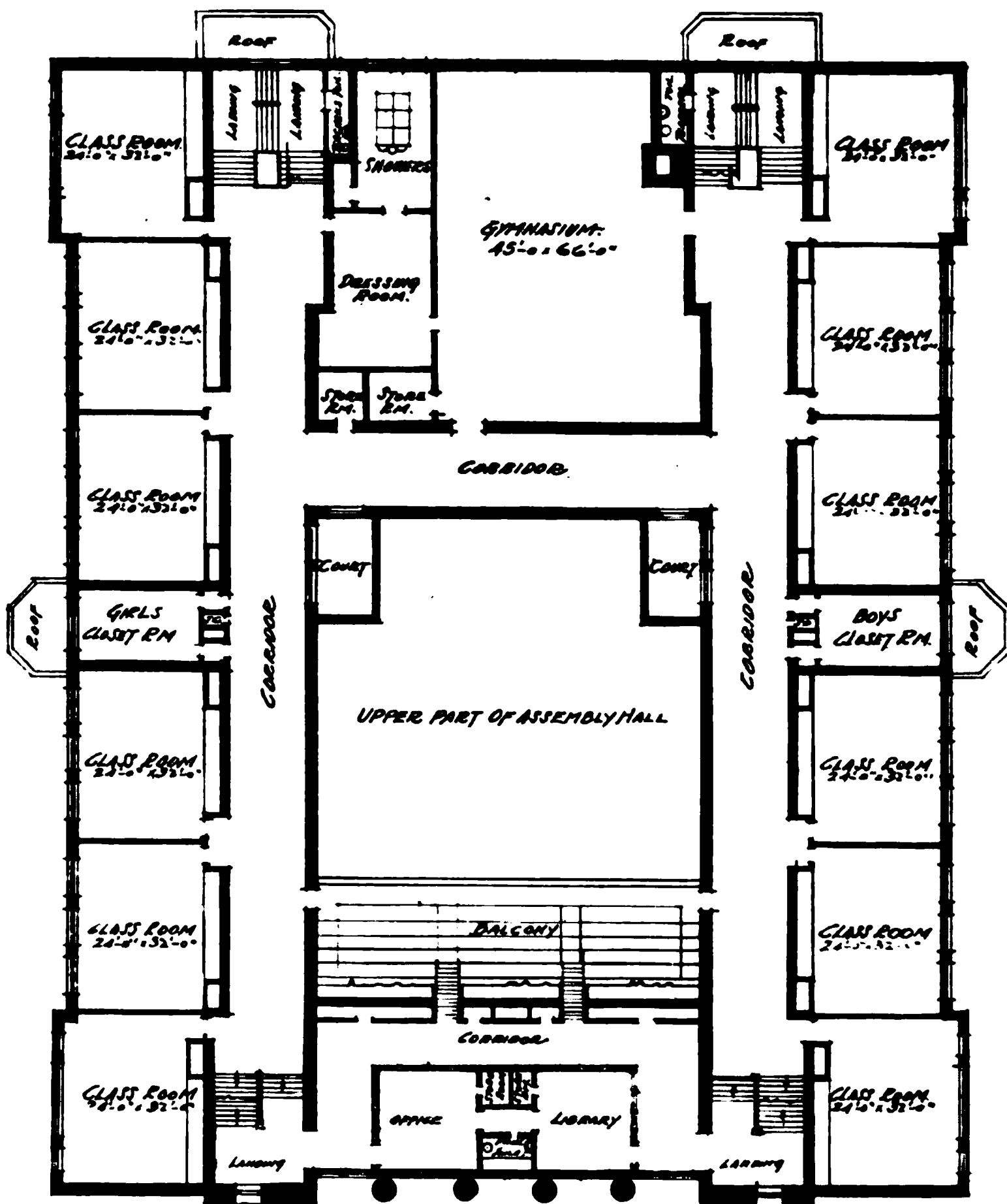
Construction of buildings that shall most conveniently and efficiently meet the needs, hygienic and educational, of schools is attracting to its special field architects of ability. The old cubical box is no longer accepted as a building good enough for a school. Simultaneously with the consideration of foundation, walls, and roof, plans must be made for means of exit, sufficient for every kind of emergency, for lighting in accordance with the best hygienic conditions possible for the eye, for classes in manual training and household arts, for assembly rooms, for class-rooms, for a gymnasium, for better floors, for woodwork that will be attractive and yet be easily dusted. There are many other conditions entering into the problem of school architecture, but it is for the architect to present the whole problem and the various steps in its solution.

There are three of the foregoing which are most closely related to the maintenance of health and are also strictly



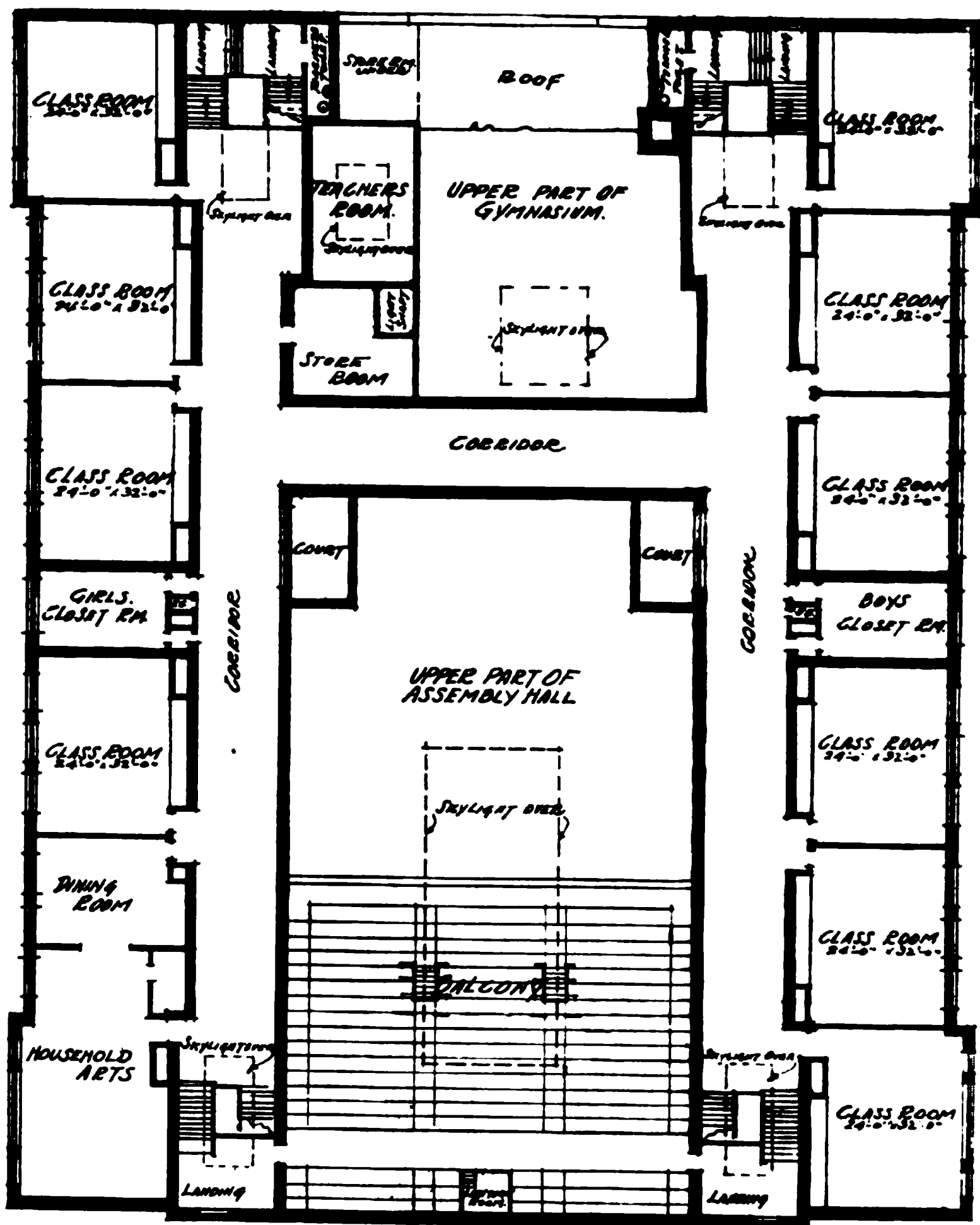
- FIRST FLOOR PLAN -

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-SECOND FLOOR PLAN-

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~THIRD FLOOR PLAN~

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educational: hygienic conditions for the eye, ventilation, sanitary and easily accessible latrines. The eye is by general consent placed first in importance among the organs of sense. After being placed there its care ceases to be a subject of concern in many school-rooms. Comparison of new buildings with old ones points to the school architect as striding in advance of the majority of teachers and principals in planning for the care of the eyes of children and students. As a rule, lighting is unilateral. Windows in class-rooms open to the east or west; south windows are in corridors only; north lighting is for corridors and art rooms only. The distance between the windows and the wall opposite them is only from two to two and a half times the height of the top of the window. Shades are set at the middle of the windows thus giving greater control of the light than formerly when suspended from the upper part of the frame. Desks are arranged so that the light falls from the left and above. Walls are tinted gray or buff in order not to have light lost by absorption. The glass space of the class-room is made equal to about one-fifth of the floor space. With all these conditions worked out by oculists and architects and then carefully observed in the plans and the completion of the building, one finds in the afternoon a large proportion of the east-front class-room darkened by shades which had been drawn to shut out the morning sun, and finds in the morning west-front rooms darkened by shades which had been drawn the previous afternoon to shut out the west sunlight. If a building is an old one with a window cut in a front wall, children should not sit facing the full light trying to read from a page thus lighted. The difficulty with the shades is not an insurmountable one, but it is hard to contend with in case of suspension from the top. In two hundred ninety-two buildings only fifty-five have the divided shade. It seemed at one time as if a force of a half-dozen men would be kept busy dividing old shades, and, by the addition of a second roller for a window, would make conditions conform to one of the

plans of architects and oculists for protecting the eyes of all children, not of those children only who attend school in new buildings. The cost, however, of changing the shades was liberally estimated and stated to be \$50,000.00, and the work was discontinued. Here again we are confronted with the financial inability to keep all schools in the best condition.

Though advances in school architecture have been numerous, satisfactory ventilation still lingers in the ante-room. Sanitary engineers are making experiments resting on theories which will eventually improve conditions in the schools, but at present we still have something termed perfect ventilation that is not perfect. When the engineers have solved this as yet unsolvable problem, teachers and pupils will not need weeks in the country each summer in order to regain the degree of vitality with which they began the school year in September. School teaching of itself is a heavy tax on nerves and strength, and the strain is greatly increased by herculean efforts put forth to arouse pupils to continuous mental activity in devitalized air.

Tax-payers who fear that our schools are equipped too luxuriously will have their anxieties relieved when they learn that a German educator after visiting the United States two years ago rates Chicago as inferior to New York, Boston, Cincinnati, and St. Louis, in its buildings and equipments for elementary schools.

When the West Division High School building was sold to a medical college, the first objectionable features that the physicians decided must be overcome were the amount of stair climbing and the long stretches of distance to be traversed in going to the water closets, and yet the number of students was not so great as that of high school pupils who had been well provided for in the judgment of the school authorities and the architect who planned that building about thirty years ago. In about seventy per cent of our buildings pupils on the third floor must go down three flights of stairs to the basement to the latrines. Other objections to

basement accommodations only, have been presented with great vigor by the mothers in different districts. There is no doubt that the system of tower latrines adopted in the construction of all new buildings during the last ten years and in all additions to old buildings, should for hygienic and protective reasons be introduced into all school buildings. The construction should be in small three-story wings added to the buildings, not by tearing out class-rooms. But here again we meet the financial difficulty. Is there no means by which a special sum could be raised for these and for window shades—two hygienic needs of seventy per cent of our schools?

School Membership.

Fluctuations in membership are peculiar and so closely related with conditions outside of the school as to present a problem of great complexity. The Official Proceedings of the Board for the year 1912-13 and the year 1913-14, present a variation in membership that indicates some conditions most perplexing to make preparations to meet.

By membership on a given date is meant the number actually belonging on that day; by enrollment, the total number enrolled since the beginning of the school year in September.

DAY SCHOOLS.

	Enrollment.	Increase.
February 28, 1912.....	291,893	
February 27, 1913.....	300,665	8,772
February 27, 1914.....	315,523	14,858
	Membership.	Decrease
February 28, 1912.....	256,694	
February 27, 1913.....	255,282	1,412
February 27, 1914.....	275,670	20,388

In the year February 28, 1912, to February 27, 1913, there was an increase in enrollment of more than 8,000 children and a loss of more than 1,000 in actual membership. This loss began throughout the city in November, 1912, amounting in that month to 1,785. Though the enrollment continued steadily to increase, the membership decreased

by 2,086 in December, 5,270 in January, and 1,889 in February, the decrease not being noticeably greater in one part of the city than in another. Though the membership in February, 1913, was eleven thousand less than four months earlier in October, 1912, no principal wrote that the seating capacity of the school was in excess of the demand. Why not? Because that capacity had not been equal to the demand in October, and the diminished membership had merely made conditions nearer normal.

With the opening of the schools in September, 1913, a demand came for seats that exceeded the greatest number needed at any time in the preceding year by 12,000. In February, 1914, the schools were trying to accommodate 20,000 more than in February, 1913. Had the experience of the year before been duplicated, there would have been no serious pressure during the present year. In the fall of 1913 the Board authorized the construction of one hundred additional portables furnishing 4,500 seats for children in grades one and two. Twenty of these were assigned to the site on which the Herzl School is to be erected. It has been necessary to increase the number to twenty-five. In the Herzl group of portables are gathered classes of all elementary grades. Outlying districts, in some cases so isolated that it is impossible for the children to attend a school which has vacant seats, are frequently asking for portables or a school-house.

Notwithstanding the congestion in parts of the city, it is true that there are vacant seats and sometimes vacant rooms in schools in the same division of the city. Principals of schools having an excess of accommodations over membership lay before members of the Board and of the City Council statistics showing that they can take care of the surplus. Every attempt to force parents to send their children to those schools which were once crowded, but today have accommodations to spare, is met with protests from parents and their representatives in the city government. If a district has deteriorated socially, or changed nationalities and

people have moved into a more congenial neighborhood, it is a question as to the right to send the children back to the deserted school. So long as a city is growing, the problem of the encroachment of the manufacturing district on the residential districts will confront the school authorities. On the other hand the insistence of parents that they receive permits to push through the lines without moving into the desired residential district, and so crowd the popular school beyond its seating capacity, should not receive attention.

In five years the membership of the high schools has increased forty per cent. There have been added to the accommodations the new Bowen, Harrison, Hyde Park, Schurz, and Senn, all of which, excepting the Senn, occupied buildings which have been turned over to elementary schools. The Parker High School has been organized, thus relieving the Englewood High School, but no building has as yet been erected for its use—the vacant ground floor rooms and other class-rooms in the Normal College and Parker Practice building serving as temporary quarters for a rapidly growing high school having a membership of 907. A suitable building has become a crying need. For many reasons the territory west of Halsted street and south of Sixty-third street should be improved by the erection of a technical high school. A site for the Curtis High School building was purchased six years ago, but the school still lingers in the old building and crowds the elementary school. Additions have been ordered for the Lake View, the Schurz, and the Tuley high school buildings. These are all needed, but first in importance are those elementary schools which are unable to care for the children attending them. The increase in apartment houses seems to be in certain sections of the city, and yet the ten districts into which the city is divided by lines radiating from the city hall, vary but little from year to year in their relative memberships. The occupancy of the same houses by larger families or more immigrant families must be a partial explanation of this situation. If the school membership increases in

the year from February, 1914, to February, 1915, as in the past year, the Board will find itself confronted by a more serious condition than Chicago has ever been forced to meet.

Salaries.

The increased revenue of the Board made it possible to meet the requests, almost demands, of teachers in the high school for increased pay for increased hours in the school day. One hour was added to the five hours, and because of this the technical high schools argued from the standpoint of Labor and insisted upon an addition of twenty per cent to their schedule. With equal urgency, principals of academic high schools argued for the same length of school day in all high schools. The Board adopted a new salary schedule, equivalent to the old schedule increased ten per cent, permitting those teachers who wish to be present five hours only to continue on the old schedule for the remainder of the school year.

The salary schedule of grade teachers in the elementary schools was increased at every point along its entire length, the advances averaging five per cent. To this were added two yearly advances to become effective in 1916, thus advancing the maximum of the primary department teacher to \$1,475.00, and of the grammar teacher to \$1,500.00 for a year of ten months. The elementary teachers had asked for a ten per cent advance, similar to that given the high school corps, but it was not given. Though not so insistent in their requests as an element among the high school teachers was in its demands, the committees of grade teachers commanded the respect of the Board members who listened with close attention to their arguments.

The advancement of the schedules of all high school and grade teachers has not brought rest. The teachers of special subjects in the elementary schools and the supervisors wish recognition by a greater difference in salary than now exists. Some teachers of technical subjects in the high school still think they should be paid by the hour.

Survey.

When the Department of Superintendence of the National Education Association met in February, 1913, at Philadelphia, much of the conversation in the corridors turned upon the survey of the New York schools recently made by a committee, of which Professor Hanus of Harvard University was chairman—a survey that cost \$125,000.00. The superintendent of the New York schools had long maintained a commanding position in the N. E. A., not only because he was at the head of the largest city school system in this country, but also because of his clear and well-defined views on education and all subjects related thereto. He certainly had his opponents, but it goes without saying that one in such a conspicuous position is, in the nature of things, certain to raise opposition. And although the younger set sometimes congratulated one another upon having crossed swords with him in public debate, yet he stood before the education association as a superintendent who had lifted the schools of New York City out of the slough of despond into which it had become customary to assume that they had fallen long before he was placed at the helm. The report, it was said, criticized adversely not only the schools but also the methods of the superintendent. On the other hand a group of New York teachers, attending the meeting at Philadelphia, was fully as severe in its comments on the members of the committee and their methods.

The National Council of Education held a meeting in Philadelphia during the same week, and appointed a Committee on Tests and Standards of Efficiency. The members of that committee, composed largely of college professors, have since appointment been busy surveying state, city, and town systems of education. They have not, however, done all of the surveying. The Governor of Ohio has had the state school system surveyed by a commission of three appointees, residing in the state, the study being conducted under the direction of a member of the City Bureau of Municipal Re-

search of New York. The state normal schools of Wisconsin have been surveyed by the same bureau and the presidents of those schools in co-operation. It is not necessary to list all of the states and cities that have been surveyed. In Illinois a committee of fifteen, composed of representatives from the State Teachers Association and other educational organizations, has undertaken a slow, painstaking survey of the state system. Thus far the investigation has been based on questionnaires, though eventually the universities in the state will do some field work.

By a strange fatality forward movements in mental and spiritual affairs are sharply defined and stated as finalities. the advance guard often forgetting

"They must upward still, and onward, who would
keep abreast of Truth."

The set, narrow confines in which reports, resolutions, articles of educational belief are constructed do not contain anything that is suggestive of life more vigorous, more resourceful, than that already achieved. The inefficient schools suffer today not from lack of standardization but from adherence to standards that have long since been left on the rubbish heap by industry and commerce, by science and genetic history, by social and spiritual growth.

The demand for testing and standardizing the public schools comes apparently from the business interests outside, because it is those interests which furnish the large sums of money lavishly poured out for investigation and printed reports. The demand did not originate in the commercial and manufacturing circles; it had its birth in education societies. The present condition is a recrudescence of the warfare between the radicals who recognize the responsibility of the school for the development of power, intellectual and moral, through self-initiated activity in a stimulating environment, and the rigid conservatives in education who hold fast to the old methods, although they give them a new dress.

Some admirable suggestions have been made in the reports

published, though they all lack one thing: the discovery of a method by which under our municipal governments, with their frequent changes, it is possible for schools to be in reality a part of the progressive activity of civilization, so that obsolete matter and forms of instruction may be overcome or cast out.

However, I fully appreciated the good things that might result from a survey, and also realized that Chicago would not be left out in the sweep of the investigation. Before going to the meeting of the Department of Superintendence to be held in February, 1914, at Richmond, Virginia, I talked with a few members of my staff about our undertaking a survey, but found them not ready to endorse the idea. At Richmond the burden of discussion was laid on surveys. After listening to the presentations by the members of the Committee on Standards and Tests of Efficiency, I concluded that great benefit would be derived in a system if the teachers, those who are directly associated with the children and youth, could first make such a study, if of only one line of instruction or effort. I then called together the superintendents to consider conducting a survey of our system by ourselves, before outside experts or lay investigators should take up the work. With seven thousand teachers and principals, it was impossible that all should have the benefit of activity in visiting schools and discussing the work observed. A few governing conditions were laid down: Every school should have a representative on some one of the survey committees, hence no school should have more than one representative; the chairmen of the committees should be taken from the superintendent's staff, because each could have greater freedom in planning the trips and the meetings of the committee in charge than a principal or teacher could; no member of a committee should be a specialist teaching the subject assigned that committee. Having gone thus far the following points were decided upon: First, each committee should hand in a written report on or before May 15; Second, the reports should indicate defects in the work as well as excellencies; Third, suggestions for improving the schools should be made freely; Fourth, the committee reports should be presented to the Board of Education in the Annual Report of the Superin-

tendent of Schools in place of the customary individual reports of regular day schools and districts by members of the superintendent's staff.

The schools were grouped by the chairmen so that every school in the city should be visited by at least one committee. Upon the urgent request of some committees one exception was made to the ruling that no school should have more than one representative on the committees; the exception was in case of three specialists in the Normal College Faculty.

Later, it was said that teachers were becoming uneasy as to the object of the visits by the groups. The superintendent then sent out the following:

"The survey which we are making of our schools at present is not in any way intended to bring schools into comparison with one another. No teachers will be marked; no schools will be marked. In the report the schools will be spoken of as schools A, B, C. Even the good schools will not be mentioned by name. There is no need for any anxiety or excitement. Without doubt, we shall be more conscious of our excellencies or failures because of visitors coming to the school, but there is nothing which will in any way disturb any teacher in his or her position as a result of this survey.

"Should there come later a survey conducted by inspectors from the outside, we shall have our own survey with which to judge their results. We also shall have gone through the first palpitations and excitement caused by a co-operative investigation."

Confidence was restored and the only strain upon teachers and principals was that felt because of teaching under the eye of fellow-teachers and principals who were, doubtless, silently comparing the methods of different schools.

Every effort possible has been made to have a frank, unprejudiced report. Defects in the plans underlying the organization of some line of instruction, or in the methods by which the plans are effectuated are presented for consideration in order that they may be corrected. Excellencies are described in order that the good may be participated in by all. Dissemination of information regarding these should arouse us to activity that will correct and strengthen our schools. This survey presents the findings of the various committees more from the viewpoint of the principal and the teacher than do the reports of the college experts. College experts who are making a specialty of testing

and standardizing public schools earnestly desire to march on to the schools of Chicago. We are ready for a fair test, but we suggest that the situation would be most delicate if a survey committee should include any one immediately concerned with the organization or instruction in an elementary or high school charging tuition fees within the corporate limits of Chicago.

If the reports of the surveys seem to emphasize defects unduly, we must remember that such emphasis characterizes the teaching mind. The day will come when goodness will be developed by emphasizing the good; truth, by emphasizing the true; beauty, by emphasizing the beautiful. It being the judgment of the superintendent that the Board would prefer to know at first hand the conclusions of the three hundred and twenty superintendents, supervisors, principals, and teachers who have made the survey, the only suggestions offered to the various committees have been in regard to keeping the reports within the space limits. The chief difficulty that confronted many of the committees was the restriction of the report in length.

Words of appreciation are due to those who gave freely of their time and strength in traveling long distances to schools many miles removed and in attending committee meetings whose sessions lasted long after school hours, sometimes until late in the evening. They are also due each principal and teacher who helped carry in the schools the work of the absent investigator in order that the school system might be benefited by the experience and judgment of their representative. To appreciation must be added commendation of the boys and girls who entered into the spirit of the survey and by their good behavior and studiousness aroused no feeling of uneasiness in the minds of their teachers who, though absent, knew that all would be well with their young people. Much stimulating information was carried back to the pupils, often arousing in their minds a desire to see those others at work. It might be well during the coming year for the faculty of a school to decide upon a day when all will improve the opportunity afforded by the Rules of the Board for visiting schools and for the school to be dismissed on that day, thus making it possible for not only the teachers but also

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**GEORGE B. SWIFT SCHOOL,
Winthrop and Thorndale Avenues, Chicago.**

SCHOOL PLANT.

Chicago has about 300 buildings used for school purposes. These, with the grounds, equipment and furniture, have cost 65 millions of dollars. Each year approximately six to eight per cent of the entire cost is expended in replacing old and unsuitable buildings with new, and enlarging the plant to keep up with the growth in school attendance; one and one-fourth per cent for repairs and maintenance; and three per cent for operation, which includes heat, light and janitor service. Thus ten to twelve per cent of the total cost is expended each year to keep the plant in operation, to keep it in repair, and to enlarge it to meet the demands of growth in attendance.

The school buildings are of all ages, dating from 1856, the date of the erection of the oldest building now in use. The buildings constructed in each year of the city's history since that date represented at the time of their erection the prevailing ideas in school architecture and equipment. As ideas changed in regard to this or that feature of school house construction, corresponding with the advance in methods of school administration, the older buildings were remodeled to meet the new requirements. Thus the newer theories of heating and ventilation, the demand for sanitary closets, the requirement of more light in the rooms, and for greater security from danger of fire, and the providing of space and equipment for the later additions to the course of instruction, such as kindergartens, manual training and household arts, have caused changes and betterments to be made from time to time which have cost, in the aggregate, many millions of dollars.

The city endeavored to keep pace with the demands of the present day doctrine in school house construction and equipment during each year of the sixty represented by the life of the oldest building. An inventory of the entire school plant reveals a great variety in architectural styles, which was to be expected; but it also shows that an attempt has been made to make an equal distribution of school equipment, though this aim is yet very far from complete realization, and to bring about uniformly good conditions in those things which affect the health, the comfort and the safety of the pupils.

The inquiry has been directed largely to the question of the suitability of the plant for the proper care of the pupils. Owing

to the limited space available for the report, attention has been directed rather to a few things affecting the welfare of all pupils, than to a hasty and superficial survey of the entire system. The question of the suitability of the school houses and equipment for carrying on the various special lines of work has been left to the consideration of the committees who are to deal with those subjects. The high school buildings have not been considered in the chapter on the complete school plant. The Senn High School, however, with its equipment, is suggested as representing the ideas of the present in the equipment of the cosmopolitan high school.

Complete School Plant.

The special kind of room and equipment necessary for the teaching of the various subjects will doubtless be dealt with in detail by the committees who have those several subjects under consideration. The plant of an elementary school, to meet the present day requirements in regard to the teaching and the care of the pupils, to conserve the health and vigor of the teachers, and to serve the community as a social center, must have at least all of the equipment listed below:

For Teaching Purposes: Class rooms, with varying equipment to meet the requirements of the various subjects; kindergarten, manual training, cooking and sewing rooms, and other special rooms as needed, properly equipped; and space on the grounds for school gardens.

For Administration: A principal's office, with a private office for consultations; store rooms for supplies and movable equipment; a room for meetings of the faculty.

For Health and Sanitation: A gymnasium, properly equipped, and separate from the assembly hall; play rooms or shelter rooms into which children may go while waiting for the doors to open in inclement weather, and for play space for pupils of the primary grades in bad weather; a bath room; a room for the use of the visiting nurse and physician; sanitary toilet rooms on each floor of the building; drinking water supplied on each floor; play ground space on the grounds sufficient to give an average of 30 square feet per pupil.

For Teachers: A rest room; a room properly equipped in which they may eat their luncheon; toilet rooms on each floor.

Supplemental: An assembly hall on the ground floor, not combined with gymnasium, so constructed that it may be used for evening meetings without requiring the use of other portions of the building; a library room for pupils' use; an adaptation

of the ground floor rooms for community center uses in the evening.

An inventory of the elementary schools, given below, will show how near they come to realizing this idea of the complete school plant:

Special Equipment—Elementary Schools.

	No. of Schools Having.	Percentage of Total No. of Schools.
1. Assembly Halls—		
On ground floor	56	
On first floor	39	
On second floor	1	
On third floor	37	
On fourth floor	20	
	203	77%
(Four high schools and 61 elementary schools have no assembly halls).		
2. Gymnasiums—		
Separate gymns.	48	
Combined assembly halls and gymns..	29	
Assembly Halls, with apparatus	56	
Class rooms, with apparatus.....	26	
	159	57%
3. Basement playrooms		about 30%
4. Bath rooms, used	75	27%
5. Manual training room, with equipment.	226	73%
6. Cooking room, with equipment.....	168	60%
Dining room with cooking room.....	46	
7. Sewing rooms		" 30%
8. Kindergarten rooms, used.....	193	70%
9. Library rooms		" 56%
10. Rest room for teachers.....		" 55%
11. Lunch room for teachers (sometimes same as rest room)		" 43%
12. Store room for supplies.....		" 70%
13. Store room for lumber		" 50%
14. A few rooms set aside for use of doctors and nurses		

In this inventory appear many rooms originally used as class rooms or basement playrooms and later adapted to special uses. In the newer schools provision has usually been made for all of the above equipment except the playrooms. There are a very few of the older schools which have practically none of this special equipment. A school which has no assembly hall, gymnasium, kindergarten, manual training room, cooking room, library room, or bath room, and which has but little playground space, should receive most earnest and immediate attention.

School Grounds.

In the early history of Chicago schools and of the districts in the suburban portions later annexed to the city, the mistake was made of not securing sites large enough to provide adequate playgrounds and space for possible additions to the buildings. When later enlargement of the grounds became necessary, it could only be done, in most cases, at great cost. Sometimes it was found to be impossible, for owners of the desired property would not sell, and the Board had no means of compelling a sale. In 1898 the legislature enacted the law under which the Board of Education may bring condemnation proceedings to secure land wanted for school purposes, and since the enactment of that law most of the older sites have been enlarged by the purchase of adjoining property. In too many cases, however, adjoining property had been so improved as to place its value above the point which would justify its purchase for school purposes.

In most cases of purchase of new sites in recent years, a half block, or a whole block of ground has been purchased, and the grounds are thus surrounded on three sides by the open streets, so that at no time in the future will there be any interference with the proper lighting of the rooms by tall structures built near the school. Such sites give room for the proper placing of the house, allow for possible additions, give play space, and permit of adornment by landscape gardening. When making additions to sites, the usual practice has been to purchase to the street on three sides of the block, filling out a rectangle which is bounded by streets on three sides and by an alley on the fourth. An examination of the maps of 291 school sites gives the following result: The number of school sites now occupying a whole block, and bounded by streets on the four sides, is 24. Those bounded by streets on three sides, number 123. Those bounded by streets on two sides, either being corner lots or extending through from street to street, and thus having two sides free from obstruction, number 110. The inside lots, extending from the street to an alley in the rear, but bounded on the other two sides by alleys or by private property, number only 34.

A school site extending across the block in one direction and to about the middle of the block in the other direction, usually covers from 60,000 to 75,000 square feet. If it occupies more than half of the block, or the whole of it, the area will be between 100,000 and 200,000 square feet. An examination of the 291 sites above mentioned gives the following results:

Area, Square Feet.	Number of Sites.
300,000 or over	3
200,000 and less than 300,000.....	3
100,000 and less than 200,000.....	37
70,000 and less than 100,000.....	62
50,000 and less than 70,000.....	86
30,000 and less than 50,000.....	74
20,000 and less than 30,000.....	23
Less than 20,000	4
	<hr/> 291

These measurements show that approximately two-thirds of the sites are larger in area than an acre of ground, and nearly one-third of them are two acres or more in area. The policy of the Board in buying large sites is to be commended. The complete block, rather than the half block should be preferred, and this it is usually possible to get in the newer portions of the city.

To enable one to judge as to whether these areas are sufficient, the number of pupils in the school must be shown in each case. A piece of ground 300 feet long and 250 feet wide furnishes 75,000 square feet of ground. If the building and necessary approaches cover about 30,000 square feet, there is left an area of 45,000 for playgrounds, gardens, etc. If 30,000 is used for playgrounds alone, and the school has 1,000 pupils, this gives an average of 30 square feet per pupil for play purposes.

If 30 square feet of free, open playground space per pupil be fixed as the minimum amount necessary to permit of normal, healthful outdoor play of school children, we find that about 50% of the school grounds of the elementary schools provide that much or more space, and about 50% of them less than that amount. If 20 square feet be fixed as the minimum, about 70% of the schools have that amount of space or more. In detail, the statement is as follows; only the space actually devoted or to be devoted when improved to playground uses has been included:

Less than 5 square feet per pupil	3 per cent of the schools
From 5 to 10 square feet per pupil	8 per cent of the schools
From 10 to 15 square feet per pupil	9 per cent of the schools
From 15 to 20 square feet per pupil	10 per cent of the schools
From 20 to 25 square feet per pupil	13 per cent of the schools
From 25 to 29 square feet per pupil	7 per cent of the schools
Total less than 30 sq. ft. per pupil	50 per cent of the schools
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From 30 to 40 square feet per pupil	19 per cent of the schools
From 40 to 60 square feet per pupil	17 per cent of the schools
From 60 to 100 square feet per pupil	6 per cent of the schools
Over 100 square feet per pupil	8 per cent of the schools
Total 30 sq. ft. or more per pupil	50 per cent of the schools

Unfortunately, some of the larger schools are among those which have the smallest playground space, and of course the space per pupil in such cases is quite small. However, some of the largest of the schools in the congested districts are immediately adjoining public playgrounds which are available during the school day for the school children. It should be noted in the case of many of the others which have small playground space, that the delay in securing larger space is owing to the hope of replacing the school by a new school on a larger site. When all allowances are made for such cases, there still remain about ten percent of the school playgrounds which have less than 15 square feet per pupil. These should all receive immediate consideration.

Playground Surface.

About 60% of the playgrounds are covered with cinders and about 30% with brick. The remaining 10% have torpedo sand, bank sand, grass or prairie soil. No wholly satisfactory surface has yet been found. Brick is clean, but for children's play it is too hard. Cinders affords a more satisfactory surface for play, but in wet weather it is dirty and "tracks" into the house, and in dry weather it is dusty. Torpedo sand, where it has been tried, is generally preferred by the principals as compared with brick or cinders. Where the covering of sand is deep enough to keep the foundation of cinders or other material fully covered, it remains clean, and children are not hurt by falls as on cinders or brick. The children generally prefer the sand wherever there is an opportunity for choice.

It is recommended that further trial be made of torpedo sand covering in new construction until its qualities have been fully tested.

Lawns and Gardens.

Although two-thirds of the schools have grass plats, the quality of the sod is good in comparatively few of them. In some cases buildings interfere with good sunlight, poor soil retards others, and some are plainly neglected. Fine specimens of *Ampelopsis Veitchii* (Boston Ivy) and a few other vines cover parts of the walls of two-fifths of the buildings. They rescue the buildings from bareness and give them dignity and home-likeness. At least a beginning has been made in planting shrubbery about the grounds of about one-third of the schools. A few schools have such elaborate landscape gardening that they appear to be set down amid small parks.

Besides lawns, vines and shrubbery, forty percent of the schools have gardens, which indicates the rapid growth of the interest in plant culture. During the growing season the engineers have much less work to do than during the winter months, and it should be a part of their regular duties to assist the school in preparing for planting. Also, they should be responsible for the care of all plants during school intermissions, especially during the summer vacations. In every school building there should be a room heated separately, where plants may be kept during week ends and during vacations in winter.

Basement Play Rooms.

With few exceptions the school buildings erected previous to 1907 were three-story-and-basement buildings. That style was somewhat wasteful of space and for that reason not economical in respect of cost. The new buildings are so constructed that all space inside of the walls may be utilized for school purposes. There is no longer a basement, whose waste spaces may be used for play rooms for the children, or places in which they may go in bad weather while waiting for the doors to open. About 80% of all buildings have such play room space, and only the buildings of the ground-level type are without them. The fact that all the space may be used for school rooms makes the use of a portion of it for play purposes appear to be an unwarranted expenditure of money, in view of the difficulty of keeping up with the growing demands for actual school rooms. However, a waiting place or shelter for pupils who come too early to school in inclement weather appears to be not only desirable, but necessary. A space the size of an ordinary school room on each end of the building is sufficient, and it may be adapted to other school uses during the day. It is recommended that a return be made to the practice of providing these so-called play rooms or shelter rooms in new buildings.

Fire-Proof Buildings.

There are 52 school buildings of (A) or fire-proof construction throughout, 24 of (B) or semi-fire-proof construction, having fire-proof stairways and corridors, and 6 which are of semi-fire-proof construction with fire-proof additions constructed later. In all of these 82 buildings, as well as in the portable, one-room buildings in use in many parts of the city, the children are as secure from actual injury by fire as they are on the open playgrounds.

The total number of pupils in the public schools at the close

of March, 1914, was 275,526. In these 82 buildings and in the portables, at the close of March, 1914, there were:

In the 52 fire-proof buildings.....	48,848
In the 24 semi-fire-proof buildings.....	21,338
In the 6 composite buildings.....	6,491
In the 170 portable buildings.....	6,500
Total	82,677

This is 30% of all of the pupils in the public schools.

Fire-Proof Additions to Old Buildings.

It would be difficult to judge of the actual danger from fire to a child seated in a fire-proof or semi-fire-proof addition, if the old portion of the building should be in flames. The question of control and direction in emergency must be considered. But considering only the actual danger of injury from fire while in the school room or on the way out of the building through the fire-proof corridors and down fire-proof stairways of that portion of the building in which his school room is situated, there is no probability, scarcely any possibility, even, of injury. In the fifty-five fire-proof and semi-fire-proof additions to school buildings, there were housed at the close of March, 1914, 29,137 pupils, or about 11% of the total. The assembly halls of such schools, in nearly all cases, are in the new portion of the building, on the ground floor, so that danger from fire or panic while the children or adults are assembled in the hall is scarcely to be considered.

If we may be permitted to add these to the 30% of the pupils who are unquestionably safe, we find that about 41% of the pupils may be considered as free from danger of injury by fire.

The remaining 60% of the pupils are housed in buildings of the old type of construction. Although experience has shown that the fire-hazard, both for buildings and pupils, is quite small, yet the danger is always to be guarded against; and the fire drill, with its consequent tendency toward orderly control in emergency, is the best means for ensuring safety from fire, and from the dangers of panic resulting from real or supposed danger from fire.

It is recommended that consideration be given to the question of providing incombustible stairways, and fire-proof floors and ceilings for the corridors, in the 200 buildings and parts of buildings which are of the ordinary construction. If this were done, the pupils would be practically as safe from actual danger from fire as in a semi-fire-proof building. The fire-hazard, as has been said, is quite small, with the buildings as they are now, yet the assurance of complete safety ought to be given. This recom-

mendation will appear the more reasonable when it is realized that most of these buildings are of such substantial character that they will probably be in use for the next forty to fifty years.

Lighting of School Rooms.

The regulations of the Board, as well as the building ordinances of the city of Chicago require, in new construction, that a school room shall have outside window glass area equal to 20 per cent of the floor area of the room. It is only within the last fifteen years that this requirement, thought to be the minimum necessary for good lighting of a school room in Chicago in all seasons of the year, was put into force. It goes without saying that many of the older buildings do not meet these requirements. An examination of 2174 class rooms in 105 buildings gives the following results:

PERCENTAGE OF GLASS AREA COMPARED WITH FLOOR AREA.

Rooms Having	No. of Rooms.	No. of Pupils.
20% or more	715	31,216
18% and less than 20%.....	327	14,156
15% and less than 18%.....	545	24,883
12% and less than 15%.....	440	20,252
9% and less than 12%.....	105	4,729
Less than 9%	42	1,991
	<hr/> 2,174	<hr/> 97,227

This would indicate, for all elementary and kindergarten class rooms, the following:

20% or more of glass area	33% of all class rooms
18% and less than 20%	15% of all class rooms
15% and less than 18%	25% of all class rooms
Total—above 15%	<hr/> 73% of all class rooms
12% and less than 15%	20% of all class rooms
9% and less than 12%	5% of all class rooms
Below 9%	2% of all class rooms
Total—below 15%	<hr/> 27% of all class rooms

Many of the rooms which show a small percentage of glass were not originally intended for class rooms. Some of them are ground floor rooms, in the three-story-and-basement style of building, and overcrowding of the school has brought about their use as class rooms. In other cases the fault is clearly one of construction at a time when less importance was attached to the question of proper lighting of school rooms.

The height of the top of the glass above the floor is fixed at not less than one-half the width of the room in new construction.

The lighting of some wide rooms in old buildings is faulty because of windows which are low in comparison, but this fault can usually be corrected by proper placing of seats.

It is recommended that immediate consideration be given to those rooms showing less than 12% of glass area. In some instances, the window openings can be made larger at small expense. Certainly, where but two or three such rooms exist in a large school building, the expense should not be considered prohibitive.

Many rooms in houses built previous to 1894 have windows in the rear of the room, as well as at the side. These make bad cross lights for the pupils and are trying upon the teacher who is obliged to face the light. It is probably impractical to change these conditions in an entire school building in the majority of cases, by enlargement of window area on the side and closing of rear windows, on account of the great expense involved, and for architectural reasons.

Heating and Ventilation.

In all of the school buildings, except a few small schools and branch buildings of one to four rooms on the outskirts of the city, the one-room portable buildings and eight old buildings in the older portion of the city, the plenum system of heating and ventilating is used. By that is meant the method of heating the air to the proper temperature by means of steam coils and forcing it into the rooms by a blower. In about 25% of the schools, additional heat is supplied in very cold weather by a system of steam coils in the rooms. The amount of air to be supplied, as required by city ordinance, is 24 cubic feet per minute. The cold season had ended when this survey was begun, and there was therefore no opportunity for uniform tests of the heating and ventilation systems, but the records of the Chief Engineer's office show that, on tests, all of the heating plants in schools in which the plenum system is used came up to the Board's requirement of 30 cubic feet per minute per pupil. In the newer schools the tests showed 36 to 45 cubic feet. A device for supplying moisture to the air, known as a humidifier, is in operation in about 35% of the schools. Tests show that these keep the air at about 42% to 45% humidity, which is not much below the standard of 50% generally accepted.

In all new construction, the air supply is taken in at some distance above the surface of the ground—in some cases 30 to 50 feet above the street level. In about 25% of all schools, the intake is 15 feet or more above the ground; in about 20% of

the buildings the intake is from 5 to 15 feet above the ground; while in 55% of the buildings, the intake is less than 5 feet above the ground. In about 15% of the buildings (included in the 55% last mentioned), it is at ground level or less than one foot above the ground. The intake at or near the surface of the ground is objectionable because much dust, and, on dry and windy days, quantities of light flying particles, are drawn in by the suction of the fans and sent up to the rooms with the air. Where they are lower than 15 feet, the intakes should be changed where possible, so as to take in the air at a higher level.

The small branch buildings and the one-room portable buildings are heated by hot air furnaces or jacketed stoves, with fresh air intakes, which supply an amount of fresh warmed air much less than is required for perfect ventilation. For these rooms, the method of ventilation by partly opened windows in less severe weather, and by occasional "blowing out" of the rooms by opening the doors and windows for a minute in severe weather, is the best method of keeping the air comparatively fresh. An improvement in the jacketed stoves which will bring about a greater draft in the foul air exhaust and in the fresh air ducts is about to be installed in some of the new portables. In ten of the small branch schools on the borders of the city and in a few rented rooms stoves are used; but in practice, wherever there is prospect that the branch will not soon be abandoned, jacketed stoves are supplied, with fresh air intakes, as in the portables. Eight of the older school buildings in the city are heated by what is termed the gravity indirect system, which means that the air is heated by steam coils instead of in a furnace, and is conducted to the rooms through flues as in the case of the hot air furnace, but is not forced in under pressure. They are to be preferred to furnaces on account of the freedom from gases and smoke. Where these buildings have not been supplied with new heating installation it has been because of the expectation that they would be abandoned soon or replaced by new structures. The observations made concerning ventilation of buildings heated by furnaces and jacketed stoves will apply to these.

While the number of pupils in the buildings heated by other than the plenum system is large, considered by itself, the total is less than 6% of the membership of the schools. Approximately one-half of them are in the portable buildings, which, considered from the standpoint of comfort and sanitation, are not objectionable.

Toilet Rooms.

Toilet rooms for pupils are on the basement floor or ground floor of the building in approximately 80% of the schools; the 20% having the toilet rooms on each floor are the new schools and additions built since 1905. In all but about 8% of the schools inspected for this survey, the principals reported the present arrangements, the fittings and the present condition of toilets satisfactory, except that the opinion prevails that there should be toilet rooms on each floor of the building. They are generally well lighted, well ventilated, well cleaned.

It is recommended that wherever possible, toilets for pupils be placed on each floor. This is particularly desirable for pupils housed in the upper floor of the building. The appointment of matrons for basement toilets for girls has been found necessary because of faults of construction which ought to be remedied. Toilet rooms for teachers should be on each floor, wherever possible.

There are some small schools and branch schools on the borders of the city, beyond the farthest extension of the city sewer system and water system. For these the sanitary arrangements are necessarily those that are possible in a rural community. Wherever the sewer system and water system have been extended, sanitary flushing toilets have been installed.

Adequacy of the Plant.

The Chicago school plant has never been adequate to house all of the pupils in buildings owned by the Board, so that they could attend school all day. Some have been housed in rented quarters and others could attend but half of the school day. It is not to be expected that the school buildings will ever be entirely adequate to house the pupils so long as the city continues to grow. The chief difficulty is the rapid increase of school population in unexpected places. Yet the city is better off today in this respect than ever before, in spite of the fact that new construction, largely because of fire-proofing requirements, costs at present nearly twice as much per sitting as it did twenty years ago. Twenty years ago the number not provided for in all day sessions in buildings owned by the Board was 127 in each 1,000 pupils in attendance. Ten years ago the number was 55 in each 1,000. Today the number is 20 in each 1,000. Part of the decrease in the number not provided for has been brought about by the use of the one-room portable buildings. Compared with the temporary rented quarters formerly in use, they are much to be preferred,

and may be built at a cost of about \$20 per sitting. If we count the pupils in portables as among those not properly provided for, the number in each 1,000 should be reckoned as 40 instead of 20. The chief gain by their use has been the providing of comfortable and sanitary temporary school rooms, so that 6,500 pupils may attend school all day instead of half a day.

Conclusion.

The suggestions and recommendations thought to be suitable have been made in connection with each portion of the subject treated. The inquiry has been confined, as was said in the beginning, to only a few phases of the subject, and mainly to those affecting the health, comfort and safety of the pupils.

WILLAM M. ROBERTS, Chairman.

CHESTER C. DODGE,

Principal Mitchell School.

ALBERT W. EVANS,

Principal Farragut School.

AVON S. HALL,

Principal Medill High School.

GENEVIEVE MELODY,

Principal Park Manor School.

IDA MIGHELL,

Principal Bryant School.

MARY I. PURER,

Principal LaFayette School.

The Committee was assisted by the senior students of the Chicago Normal College who collected much of the data, particularly that for the reports on size of playground space used, surfacing of playgrounds, school gardens, and on lighting of rooms.

ADMINISTRATION.

Teachers—The present rules of the Chicago Board of Education carefully safeguard the children of our city by vigorously excluding the untrained and the inexperienced applicants for teaching positions, but no such high standard is required of those seeking executive or administrative positions. While these must be experienced as teachers, they are not required to have had any previous executive or administrative experience; nor is any way open whereby Chicago may secure the services of many persons who are elsewhere filling positions of this character with marked efficiency and eminent success. In order to correct this manifest defect, your Committee recommends the adoption of the following rules governing entrance examinations for principals of schools: (Proposed changes in capitals).

I. EXAMINATION FOR CERTIFICATES:

Principals. Candidates for certificates of principals of elementary schools must present credentials showing:

- (1) (a) Graduation from an accredited college, and (b) Four years of successful experience in graded school work; or
- (2) Five years of successful experience as a superintendent of a system of schools; or as principal of a graded school, not more than half of whose school day has been devoted to teaching; or
- (3) Five years of experience in the Chicago schools, as a head assistant with an efficiency mark of "excellent" or "superior".

They will be examined in one major and five minor subjects, as indicated below, and must attain a general average of eighty per cent. Major: Professional Study.

Minors: (1) English.

(2) Mathematics.

(3) One of the following: (a) Geography (Political, commercial, physical), (b) General history and civics.

(4) One of the following: (a) Physics, (b) Chemistry, (c) Botany, (d) Zoology, (e) ANY FOREIGN LANGUAGE.

(5) One of the following: (a) Drawing, (b) Vocal music. (c) Physical education.

(Added) Oral Examination of Candidates to Supplement the Written.

Inasmuch as many Normal Schools are now maintained in Illinois by public taxation, of which Chicago pays a large part, and from which Chicago should secure some returns, it is recommended that graduates of these schools be admitted to examination for teachers' certificates without the teaching experience required of those not graduating from Chicago Normal College. This principal is embodied in the following proposed rules for elementary and high school certificates.

Teaching in High Schools.

Candidates for General Certificates of Teachers of Academic Subjects in high schools must present in advance credentials showing the following:

1. (a) Graduation from an accredited college, and
(b) Two years of successful experience in graded schools of good standing; or
2. (a) Graduation from an accredited college and
(b) GRADUATION FROM ANY ACCREDITED NORMAL SCHOOL; and
(c) One year of successful experience in graded schools.

Note.—COLLEGE GRADUATES MAY SUBSTITUTE FIVE MAJORS IN EDUCATIONAL COURSES IN PLACE OF ONE OF THE REQUIRED YEARS OF EXPERIENCE.

Teachers in Elementary Schools.

Candidates for Certificates of Teachers in Elementary Schools must present credentials showing the following:

1. (a) An education equivalent to that indicated by the public high school course of Chicago, and
(b) At least four years of successful experience in graded school work; or
2. (a) GRADUATION FROM AN ACCREDITED COLLEGE; and
(b) Two years of successful experience in graded school work.

Note.—COLLEGE GRADUATES MAY SUBSTITUTE FIVE MAJORS IN EDUCATIONAL COURSES IN PLACE OF ONE OF THE REQUIRED YEARS OF EXPERIENCE.

3. GRADUATION FROM AN ACCREDITED NORMAL SCHOOL.

They will be examined in the subjects named below, and must attain a general average of seventy-five per cent with no subject below fifty per cent.

Professional study.

English.

History.

Geography.

Mathematics.

Science—Elements of physics, biology, physiology and chemistry.

DRAWING OR MUSIC OR PHYSICAL EDUCATION TO COUNT HALF CREDIT.

Teachers in Kindergarten.

Candidates for Certificates of Teachers in Kindergartens must present credentials showing the following:

(a) An education equivalent to that indicated by the public high school course of Chicago, and

(b) Graduation from an accredited kindergarten training school;

(c) Omit.

Change last sentence in note, as follows:

EACH CANDIDATE WILL BE REQUIRED TO SING SIMPLE KINDERGARTEN SONGS AND TO ACCOMPANY HERSELF ON THE PIANO.

II. APPOINTMENTS:

On the broad, general principle that the vacant position should be filled by the best qualified applicant, and on the further principle, axiomatic in its simplicity, that the mere date upon which a candidate qualifies is not a factor in efficiency of service, we make the following recommendations:

Principals.

1. That the choice of principals be not influenced by the date on which the certificate was obtained.

2. That principals' certificates held by teachers in the Chicago School System, whose efficiency marks are "Excellent" or "Superior" be not required to lapse by reason of time.

Teachers.

1. That there be but one eligible list, and that teachers' names, when placed on the list for assignment, be inserted according to their merit record.

2. That assignment from the eligible list be made under the same rules governing transfers.

III. SUPPLEMENTARY SCHOOLS.

The various activities that may be carried on in a school building are so closely inter-related that the work may be more efficient if all of the activities are placed in charge of the same principal. An efficient principal of a day school is a power for good in the district, and can be more useful to that community than any other who comes into school for short periods to conduct evening school, vacation school, social center, etc.

We, therefore, recommend that, wherever possible, the principal of the day school be *ipso facto* principal of all the school activities conducted in the building.

IV. PROMOTIONAL SYSTEM.

After due consideration of the operation for several years of the so-called Promotional System, and in view of the well known fact that a very large number of teachers really neglect their school work or injure their health in preparation, the committee is unanimous in recommending that the present system of promotion of teachers and principals be abolished.

V. TRANSFER OF TEACHERS.

The rules governing the transfer of teachers have grown out of a very commendable desire to place teachers, as far as possible, in schools of their own choosing where they may work happily. This freedom of choice has been abused by some to the extent of making application for transfer to many schools, (as high as twenty-five) and for many grades, (as high as the entire eight of the grammar grades). It not infrequently happens that a transfer, made for purely geographical reasons, occurs during a semester, and that many other transfers follow in its wake, thus interfering with the work of many rooms. To obviate these defects, the following recommendations are made:

1. That transfers of teachers during a semester be avoided when possible; that other transfers be ordered to go into effect at the beginning of the next semester.

2. That application for transfer to more than six schools, or in more than three grades and these successive, be not effective unless approved by the superintendent of schools.

VI. EXTRA TEACHERS.

That an extra teacher be furnished to every first group elementary school, and that the Rules of the Board be changed so that it shall be her duty to substitute when required, and to assist retarded pupils.

VII. SUBSTITUTES.

It is the general verdict that experienced teachers render more valuable service as substitutes than do beginners. High school schedules for substitute's pay are recognized facts. It is, therefore, recommended that in the elementary schools, four dollars per day be paid to experienced teachers for substitute service and that three dollars per day be paid to those who have never been assigned as teachers.

VIII. CHICAGO NORMAL COLLEGE.

The Chicago Normal College now receives students graduating from high schools upon examination for entrance. Colleges throughout the Central West, including the State Universities, accept our high school graduates upon a certificate system and without examination. The Chicago Normal College is supported entirely by public taxation as are the public high and elementary schools and the State University. Its privileges should, therefore, be available to all citizens on the same conditions as are the privileges of all other public schools. The door of opportunity should be as wide open there as it is from grade to grade of the preceding schools. We recommend:

1. That the Chicago Normal College be made a public school, open to all, admitting residents of Chicago on the certificate system employed by the large universities, subject to present physical examination requirements.
2. That the facilities of the Chicago Normal College be increased and made accessible to pupils in the various parts of the city.
3. That the graduates from the Chicago Normal College be granted certificates to teach in the Chicago School System.

IX. RE-CLASSIFICATION.

The separation of the Elementary School and the High School creates a break in the educational progress of the children which operates to their distinct disadvantage. The immature graduates of the eighth grade on entering the high schools begin an educational training under too many teachers, too much machinery, and under conditions demanding too much responsibility without the close personal supervision of a particular advisor. As a result, many fail to adjust themselves and are easily lost in these strange surroundings, for which they have not been especially trained. No wonder that a very large per cent of these pupils do not remain in the High schools to take up the work of the tenth grade. In order that there may be better articulation of these two parts of our public school system, a more gradual transition from the work

of the Elementary school to that of the High school, and a more satisfactory grouping of pupils based on similar physical and mental development we recommend:

1. That the ninth grade be taken from the high schools and placed in the elementary schools.
2. That the seventh, eighth, and ninth grades be treated as a unit and operated departmentally.

X. PROFESSIONAL VERSUS COMMERCIAL STANDARDS.

While we gladly recognize the spirit of devotion to their profession which characterizes the great majority of the teaching force, we, as a committee, feel that we should fail in our duty if we did not notice a tendency which unfortunately appears to be growing. Out of the struggle for reasonably decent pay, and out of the introduction of much technical and vocational work, has arisen a feeling among a large number of teachers that they are hired by the hour. Imagine a Pestalozzi, a Froebel, or a Dr. Arnold working by the hour. Until plastic human material becomes as inert as wood and iron, no real teacher will consent to have his work measured by a time standard. Like the good minister, the good nurse, and the good physician, the good teacher gives generously of himself; and professional pride is the highest incentive that can be placed before any teacher. In no walk of life are the possibilities of harm arising from the commercial standard of time as distinguished from the professional standard of service as great as in the school room, and no one wants his child trained to the idea that the service rendered by them to society should be measured in hours.

Equipment.

I. While the committee recognizes the improvements the last few years have brought in equipment, in that many more schools are supplied with facilities for Manual Training, Household Arts and Science, and the Kindergarten, yet, as changes need to be made only where improvement is desired, we shall give especial attention to those phases of our equipment which it seems to us can be made better. In many instances the difficulties do not arise from the quality of the equipment, but from the delay in its installation. After the building is completed and occupied, it frequently takes months to get, not some unusual or new equipment, but the regular equipment to be found in other schools. In many instances supplementary appropriations have to be made. We, therefore, recommend:

1. That every school building, high and elementary, have a

standard permanent equipment, approved by the Superintendent of Schools.

2. That so far as possible this equipment be included in the original contracts for the building. In this connection we would especially recommend the equipment of bath rooms, sewing rooms, cooking rooms and manual training rooms.

Among the conveniences not usually, or at all events not always, provided, and which we believe should be included in the original contracts for new buildings, we would call especial attention to the following:

1. Adequate storage room for supplies and supplementary reading.

2. A teachers' rest room, simply but suitably furnished.

3. A teachers' lunch room, properly equipped. Not only ought the teachers to have this anyway, but the effect on the school of the teachers' meetings held incidentally and unconsciously while they eat together can hardly be overestimated.

4. A general reading room, adjacent to or connected with the principal's office.

5. A teachers' wardrobe and suitable accommodations for supplies and books in every class room. The design for all cases should be approved by the Superintendent of Schools, that they may be modern, commodious and suited to the materials and supplies for art, construction work, etc., as well as for books. The ordinary bookcase does not fulfill the requirements.

6. An automatic clock in every class room, run by a master clock in the principal's office.

7. Double window shades. In texture and color those furnished the Senn and Hyde Park High Schools have proved satisfactory. The improvement in the lighting of the rooms made possible by the use of these double shades is so great that we recommend their installation in all buildings, old and new.

8. A desk for every teacher, similar to those now furnished principals.

II. The following two points in the construction of our buildings deserve attention:

1. All boys' toilet rooms should be equipped so as to insure privacy.

2. The height of the hooks in the dressing rooms and of blackboards in class rooms should be suited to the grade of the pupils.

III. The provision made for that part of our equipment which comes out of the Educational Fund is much more inadequate than for that which comes out of the Building Fund. Any elementary school that has a stereopticon or a duplicator has purchased it

from money raised by school entertainments or by the teaching force. Yet stereopticons and slides have been obtained to such extent that the Board makes a table especially for stereopticons and furnishes the Projection Club room for the storage and distribution of slides, and duplicators are in such general use that the Board keeps mimeograph paper and ink among the regular supplies. It seems to the committee that the money raised by entertainments ought not to be spent for what in the present day are educational necessities, and we therefore recommend that the Board of Education make provision for furnishing schools with stereopticons and duplicators, and we further recommend that the Board of Education take over the property of the Projection Club and maintain it for the benefit of the schools. There are also certain office devices which are rapidly becoming necessities. Autographic letters are rare in the business world, and the typewriter is in such common use that our own central offices think nothing of requiring our lists of graduates to be typewritten.

We, therefore, recommend that each school office be furnished with a typewriter and filing devices.

We now come to the perishable equipment, for which the Board of Education makes some, but not adequate appropriation, i. e., books, maps, charts and globes. Here again the money raised by the entertainments helps out and maintains the efficiency of the schools. In our opinion the funds raised by the schools should not be used in this way; they should be devoted to such purpose as beautifying the school. We, therefore, recommend:

1. That every new school building be granted a larger initial appropriation for supplementary reading, reference books, maps, charts and globes.

2. That the annual per capita appropriation for supplementary reading, reference books and illustrative material be increased.

As to the administration of these appropriations, we make the following recommendation for the reasons indicated:

1. That principals be authorized to order supplementary reading and fund books within the limits of their appropriation, directly from the publishers and to present the O. K.'d bills to the Business Manager for payment. The delay in supplying fund books at the beginning of a semester is frequently measured by weeks rather than days; and this causes an irreparable loss to both the individual pupil and the class.

2. That the annual appropriation for schools be made so that any excess in one fund in a given school may be transferred to another fund of the same school on and after the beginning of the second semester of the year for which the appropriation is

made. It is impossible to predict accurately the needs of a school for a year; practically every year high school principals have to ask one department to scrimp in order to help out another department, and if the real need of the school is in the rental of a typewriter that every member of the class may have a machine, the fact that there is still money left for typewriter ribbon and paper is at present no advantage. In neither private nor public budgets is it possible to segregate expenses accurately for a year in advance. Either the possibility of transfer from one fund to another or a generous appropriation for general purposes is necessary for the wise administration of each school.

3. That an itemized statement of the cost of all equipment and supplies delivered to the school by the Bureau of Supplies be sent to every school at least once a month.

In the matter of industrial and vocational training, the committee recognizes the value of the beginnings which have been made, the handicaps under which these experiments have been conducted, the necessity of continuing and extending the work, and the desirability of the greatest possible freedom in these attempts along new lines. In a system in which the average classes naturally run large, it is of course difficult to find the means for work which requires expensive equipment and small classes, not to mention the further difficulty of obtaining competent teachers. Yet so great is the necessity of actually showing the willingness and the ability of the general school system to handle this work and the necessity of a larger revenue for school purposes, that we recommend the largest possible appropriation for the continuation and extension of the work already began along the lines of industrial and vocational training.

Supplies.

1. The Committee on Administration sent out questionnaires to sixty-five schools to ascertain the consensus of opinion as to supplies. The increased efficiency of the department, the simplified method of ordering and the regular delivery afford general satisfaction. At those schools having storage facilities that admit of ordering supplies in quantities, the principals report little difficulty in maintaining a working stock. Where supplies must be ordered as needed, the conditions are radically different, for frequently it is impossible to obtain standard supplies in daily use for weeks at a time. This hampers the efficiency of the teaching force, is a factor causing the retardation of pupils, and necessitates the re-ordering of materials through a number of weeks, sometimes months.

The Supply Department should be thoroughly acquainted with the probable needs of the schools throughout the school year; the order clerks should have constant and definite knowledge of the stock on hand, and an adequate minimum reserve supply should always be maintained. A complex business system, many bureaus with a consequent division of responsibility, and inefficient help seem to have caused these conditions. The committee, therefore, recommends:

(a) That some simple but up-to-date system be established in the business department to procure and distribute supplies promptly, and to fix responsibility for unbusiness-like delays.

(b) That a stock of standard supplies be kept, sufficient to meet the demands at all times.

(c) That some method of filling back orders be enforced so that it shall not be necessary to duplicate requisitions.

2. The list of supplies has not been revised for several years. Pottery for drawing, carbons for stereopticons, rubber stamps of the alphabet and digits, cards for mounting pictures, cross section paper and other supplies have grown into general use. Many of the printed forms might be eliminated; others need simplification and some should be added.

3. Some provision should be made for certain office supplies. There are a number of incidental expenses, which most of the principals meet out of their own pockets rather than have their schools suffer. We, therefore, recommend that each elementary school be given an annual appropriation, depending in amount upon the membership, but in no case to exceed \$50.00, for incidental office expenses, to be accounted for in the same manner as the similar appropriation to high schools.

4. The telephone is a powerful aid in controlling attendance and maintaining discipline, but its use is restricted because of the expense involved. We recommend that the telephone company furnish specially marked slugs to be used for these purposes.

5. Inasmuch as schoolhouse supplies are entirely distinct from educational supplies, and are ordered through a different department, we recommend that each engineer be provided with an order book and be responsible for ordering all supplies for his department.

6. In the department of industrial education, an unusual condition obtains. All supplies for the first three grades are furnished; lumber for all manual training is provided and quite generally the boys take home the finished product.

In the cooking department a pro rata allowance is made for

each girl. For the sewing, the only provision is a very small appropriation, insufficient to provide even a few general supplies. In many districts this entails a distinct hardship upon the girls and often a very considerable bill of expense upon teacher or principal: Therefore, we recommend that sewing be put upon the same basis as cooking and manual training, by being given a pro rata appropriation based upon membership.

7. Systematic industrial work in the lower grades is a comparatively recent innovation and we appreciate that the department is not yet efficiently organized. With increased familiarity with the materials and their use, much friction and delay will doubtless be eliminated. However, as this committee has definite knowledge that supplies actually in stock have been marked "out," and that there has been, what seems like, unnecessary delay in filling orders filed by the head of the department and principals, we recommend that there be employed at the supply rooms a clerk familiar with the work of the schools and with construction material, whose duty it shall be to keep in stock, apportion and send out construction supplies under the direction of the head of the department.

8. The present method of procuring supplies for the various science departments of the high schools is too slow and too expensive. Classes are frequently put to inconvenience because materials needed for their use are not delivered at the proper time. In addition, the prices quoted by the science supply companies for the delivery of small allotments of such supplies to each department of the many high schools are far in advance of the prices which could be obtained if the Board of Education would purchase those supplies at one time in large quantities. We, therefore, recommend:

(a) That a standardized list of supplies for high school science be made, and that a stock of the same be kept at the supply rooms.

(b) That a clerk familiar with such scientific material be employed to order and apportion such supplies.

9. The printing department now located at the Chicago Normal College is to be greatly commended for its efficient service while laboring under many handicaps which tend to prevent it from being a most valuable adjunct of the Chicago school system. The department should be enlarged and located where the responsible heads could make the most valuable use of it for the immediate benefit of the whole school system. We, therefore, recommend that the printing department be removed from the Normal College, more fully equipped and more centrally located.

We suggest the consideration of the supply rooms as a possible location.

WILLIAM C. DODGE, Chairman.

MORGAN G. HOGGE,
Principal, Harper School.

HARRY KEELER,
Asst. to Prin. Englewood High School.

HIRAM B. LOOMIS,
Principal, Hyde Park High School.

JANE A. NEIL,
Head Asst., Norwood Park School.

WILMA RHINESMITH,
Teacher, Stewart School.

KATHERINE S. RUEFF,
Head Asst., Mozart School.

GEORGIA A. SEAMAN,
Principal, Bradwell School.

Minority Report.

Your minority believes that until the time arrives when the corps of teachers in any school has a large voice in the selection of the principal of that school, lack of leadership will not be overcome; that the accepted method of securing principals offers no incentive for educational leadership, and the great disproportion in salary between those occupying teaching positions and the few who occupy supervising positions, only emphasizes this lack of efficiency in the manner of selection; that the collective judgment of a corps of teachers working daily with a principal should be a valuable aid to the Superintendent's office and to the Board of Education in determining and recognizing leadership in the schools.

The recognition by the Board of Education of the value of the teachers' advisory voice in educational affairs through the school councils is a long step toward the development of a larger democracy in the public school system, and the growth of this democratic spirit among the teachers will be rapid as more responsibility is given to them. From a voice in the making of courses of study and the selection of text books it is not a far cry to a voice in the selection of school leaders.

Your minority is not ready at the present time to suggest a more definite plan for recognizing leadership but feels that in any plan the democratic principle of the consent of the governed should be an essential feature.

WILMA RHINESMITH.

CHILD STUDY.

The Department of Child Study and Pedagogic Investigation was established in the public schools of Chicago in 1899, owing to the inspiration and zeal of Dr. Walter Scott Christopher. We now have incorporated in our public school system a bureau of child study, consisting of a director and two assistants, who make psycho-physical and allied investigations having a pedagogic bearing.

It would be impossible for this committee to measure the value of this institution. At whatever cost the city must maintain and perpetuate a bureau, the purpose of which is to discover, segregate and care for children requiring special attention, such as the sensory-defectives, the subnormal, the retarded, incorrigible, under-nourished, anaemic, tubercular, nervous, defective-speech, epileptic, precocious, or others, who for varied reasons have become problems to the school whether public, parochial or private. To allow such children to grow up without being properly cared for is a menace to society and a neglect of humanitarian principles and enlightenment.

I. How Children Come to the Attention of the Department.

1. Children come to the attention of the child study examiners through various channels:

- (a) Principals and teachers of schools refer cases.
- (b) School nurses bring children in to be examined.
- (c) Parents on their own initiative or at the suggestion of the teacher or nurse bring their children.
- (d) Various societies, such as the Jewish Societies and the Associated Charities, send in cases.
- (e) Children come for examination through the courts.
- (f) The Compulsory Division is active in having troublesome children referred to this examination.
- (g) All boys in the Parental School are examined.
- (h) Where five or more children in one school are reported as needing an examination a representative is sent there to diagnose the cases.

2. In so far as possible the department tries to get hold of all the children in the city needing attention, and by courtesy of a rule of the Board of Education, the examination is extended to children outside of the city when requests are made. Since Sep-

tember, 1913, about 1,800 children have been examined and treatment prescribed. These are new cases, and do not include re-examinations. These children are usually school cases, but in many instances are over and under school age.

NOTE: Not only does the bureau care for children thus brought to its attention, but it also gives physical examinations to all candidates for entrance to the Normal College, and to all candidates for teachers' certificates in the city.

3. We find specific defects in the mode of bringing children to the attention of the department:

(a) Adequate information and instructions are not in the hands of all principals and teachers in this matter of referring children for examination; this fact necessitates loss of time and a certain degree of hesitancy in securing proper blanks and taking appropriate steps for the child's examination.

(b) The necessity for previous appointment is not always recognized or observed, so that children are brought in at times when their cases cannot be attended to properly.

(c) Many schools having the required number of five or more children needing examination have been unable to secure the services of an investigator without long delay and repeated requests for help.

(d) Many parents object to having their children examined and transfer them to other schools or to schools outside of the system, because no one has the authority to compel such examination.

(e) Many cases, through lack of facilities, or of some one to take the children to the department, fail to receive the needed attention.

4. We recommend in referring children to the child study division for examination:

(a) There be more widespread distribution by the department of information as to the proper procedure in getting children examined. This will necessitate the printing of a circular of information for teachers, principals and parents, giving all the necessary details in the process.

(b) That there be more prompt response by the department to appeals from schools for help. Compliance with this recommendation would necessitate the enlargement of its corps to meet the demands of the city.

(c) That the circular of information referred to above should contain explicit instructions as to making appointments previous to examination, and that this requirement be enforced unless sufficient excuse exists for waiving it.

(d) That every first grade child, who on account of unsatisfactory work, is not promoted at the end of forty weeks attendance, be examined by the department, in order to discover his difficulty and provide proper treatment very early in his school life.

(e) That more cases of atypical children who are not of the subnormal type be examined and the teacher advised as to the best means of handling them.

II. Procedure Used by the Department in Examinations.

1. The nature of the examination given any child is determined by various conditions:

(a) The fact that the same examination would not be given to all the different types of children need not be elaborated.

(b) If the child is accompanied by parent or guardian, he is examined more thoroughly, and many verbal suggestions are given which help to secure the carrying out of the recommendation.

(c) The members of the department emphasize different aspects of the examination, and use to some extent different technique though certain methods are common to all.

In general, the procedure is as follows:

(a) Taking the significant facts in regard to the history of the case, and the environmental conditions.

(b) Physical examination including anthropometrical measurements, observation for adenoids, enlarged tonsils, defective teeth, mal-nutrition, defects of vision and hearing, tubercular, nervous or anaemic conditions, causes of speech defects, and other physical ills.

(c) An examination to determine the general mental status of the child, or his capacity along certain special lines.

(d) Recording of the results on blanks, which are then filed.

(e) Formulation of recommendations and suggestions.

2. The examination determines as far as the first diagnosis permits the character of the defects, the disposition of the case and the modes of treatment. Unquestionably the department serves the public well in this matter. Familiarity with a large number of children's cases of different types renders the examiners skillful in recognizing difficulties. Often parents who were indifferent to the advice of principals or teachers carry out suggestions given by the department.

3. This aspect of the work suffers, however, from two defects:

(a) Unnecessary lack of uniformity in technique among the different members of the department.

(b) Insufficient standardization of technique and of method of keeping records.

NOTE: The statement applies especially to the mental side of the examination.

4. In indicating the need of more uniform and standardized technique, the committee does not wish to imply that a finished and inflexible technique should be adopted. The present status of the science of tests would not justify this. However, it should be possible to adopt a uniform technique to be used by all members of the department as the basis of the examinations in the common types of cases during a given period, for example, a year. These tests should be fundamental, though additional ones might be used according to the interests of the individual members. The agreement should also include a very definite formulation of the method of giving the tests and of making the records. The records would then represent an intelligible and interpretable body of material, which would yield information not only with regard to the individual child, but also with regard to the evaluation of the tests themselves, and, what is perhaps more important, with regard to the general contributory factors in the production of typical problem cases.

To determine the efficiency of individual tests, with a view to their retention or rejection in the series, a careful study of these records should be made from time to time, and a further comparison made with material gained by the follow-up reports suggested by this committee. Arrangements should also be made to apply these tests to standard groups of unselected children in the schools for the establishment of norms, except in cases where this has been adequately accomplished by other investigators. This represents an element of educational research, which, in our opinion, is essential for the establishment of a progressively more valuable technique. Without it the department gains only as the individual members increase their skill in diagnosing cases; with it, a steadily improving technique might be established, which would mean a permanent gain for the department, and would be a tool to put in the hands of any new and less experienced member.

III. Disposition of Cases Examined.

1. After the children have been examined, a verbal report of the findings is given parent or nurse. A written recommendation is frequently, but not always, sent to the person referring them, and in case of assignment to special schools, a copy is sent to the Superintendent of Special Schools. Another copy is filed in the child study office with a report of the examination. These

recommendations are often frankly tentative, calling for a certain line of treatment and a later report or re-examination. They are variable in explicitness and value, depending partly on the nature of the case and partly on the way they are made out. Children are recommended for disposition in various ways. Some are excluded from school, because they are considered of too low mentality to be benefitted by regular school work and are assigned to institutions or kept at home. Many cases are assigned through these examinations to special rooms of various sorts, mainly rooms for subnormal and retarded children. Cases are recommended to open air rooms with directions for special care. Defects of vision and hearing, and cases of adenoids, tonsils, anaemia and the like, found by the department, are referred to various agencies for treatment. Precocious and a-typical children are usually assigned to regular grades or special rooms with specific recommendations.

2. At present we find several defects in the system of reporting findings:

(a) Reports are often delayed. Principals frequently say that many weeks intervene between the examination and report.

(b) Reports sometimes do not reach all persons to whom they should be sent. A child recommended for transfer to a special school may be reported to that school, but may not be reported back to the principal or teacher of school from which he is to be transferred.

(c) Reports are not always adequate for establishing a proper educational or remedial regime. NOTE: Repeated examinations are necessary to make the proper recommendations in many cases, and the department is not always able to make a second one.

3. We recommend as to reports:

(a) That reports be sent at once to the principal of the school referring the child; directly to the principal of the school to which the child is assigned, provided a transfer is suggested; to parent or guardian of the child; and to the Superintendent's office. This recommendation will require additional clerical facilities in the office.

(b) That schools preserve these reports that the cases may be checked up later. Principals should be notified that they are to keep these records on file in such a way that they be of service as educational material.

IV. Compliance With Recommendations and Following-Up Cases.

1. According to the reports of the principals of 191 schools, approximately 1,126 cases referred by them have been examined

since September, 1913. In 653 cases the decisions of the department have been carried out; in 473 there have been failures to comply with the recommendations. The child study office has no way of compelling the enforcement of its findings.

2. It is to be regretted that after the examination, the department is forced to give up its relationship to the child. When he is referred to the school center in which he belongs, the child is in the hands of other school authorities. We find that failures to comply with the recommendations come from:

- (a) Objections, indifference or poverty of parents.
- (b) Lack of school or institutional facilities.
- (c) Transfer of child from one school to another in order to escape compliance—a child thus becomes “lost” to further remedial care.

(d) In many cases there is no way of telling whether or not the recommendations are carried out, because the office has no reliable way of getting further reports.

3. We recommend in order to reduce failures in compliance:

(a) That a radical enlargement and extension of the workings of the child study department be made, one that will include a systematic following-up of all decisions and recommendations; that it be the duty of the department to follow the child when he leaves school, not alone for the welfare of the individual, but also to secure statistics, which may in time lead to effective legislation for the future welfare of the race.

(b) That a visitor or social worker be appointed on the order of a visiting nurse, whose whole time shall be given to following up cases and getting results.

(c) That a definite “follow-up” system be adopted by the office somewhat as follows: One month after examination of the child a printed card be sent to the principal or other agencies, who had referred the child, asking what treatment he had received; if a negative report is given, the process should be repeated until definite disposition is reported; in case of report of disposition in line with the recommendation, a further inquiry should be sent six months later, asking for report of results of treatment.

(d) That more wide-spread facilities be provided, such as city homes and schools for special boys and girls; segregation of retarded cases from subnormal; segregation in these classes of boys and girls; more specially trained teachers; transportation facilities for all cases.

NOTE: Homes or schools for girls, corresponding to the Parental School for Boys should be provided.

V. Co-operation of Departments and Agencies.

1. Several agencies of the educational and city government are concerned with the child study department in providing for children who need special care, such as:

- (a) The Health Department, with school doctors and nurses.
- (b) The courts, especially the Juvenile Court, with probation officers and police.
- (c) The compulsory department.
- (d) Principals and teachers of the schools.
- (e) Private and philanthropic persons and societies and administrators of philanthropic funds.
- (f) Superintendency of the special divisions of the school system.

2. All of these departments are active in their work for the welfare of the children of the city, and they are reaching a large percentage of the cases needing attention.

3. We find specific defects in the organization of the work of these departments. Their relationship is mainly voluntary and gratuitous. No real unity of organizations or team work exists, and in some cases they are working at cross purposes. There is lack of understanding as to the work supposed to be done by each part of the entire institution for child welfare.

4. As to the co-operation of the departments we recommend:

(a) That the Child Study Department be brought into closer and better organized relationship to other departments enumerated above, to secure compliance with its recommendation. "Parental objections" would be largely reduced if all agencies united to bring pressure to bear upon the cases.

(b) That this department have a system of records, showing what agency or department is concerned in following up a given case, and what success is attending its efforts.

(c) That re-examinations should be demanded in doubtful cases, both for the sake of the child and the department, so that the true value of the diagnosis of the case may be determined.

VI. Summary and Conclusion.

1. It is the opinion of this committee that owing to the growth of the city's demands, and owing to increased calls by schools for instructions in handling difficult and peculiar children, the Child Study Department has been crowded beyond its capacity; that it lacks organization both within itself and in its relation to other

agencies looking to the welfare of children in the city; and that it therefore does not reach all cases needing attention, and its records and recommendations are now insufficient to serve the demands made upon it. We recommend, therefore:

- (a) That its scope be enlarged.
- (b) That it be given more help and more facilities.
- (c) That it be put in closer relation with other departments which care for children.
- (d) That it be given greater power to call upon agencies concerned in carrying out its recommendations.
- (e) That there be more definite internal organization, and that it be made more accessible as a bureau of educational research for the welfare of all classes of children in the city.
- (f) That every school have one or more ungraded rooms, with a maximum attendance of 25 pupils, providing a specially equipped teacher and facilities for treating these pupils as to their individual needs.
- (g) That since mal-nutrition is responsible for much of the retardation and subnormality, and since marked improvement is noted where proper food is provided for such children, steps be taken to insure suitable food, at least one meal a day, to all pupils needing such attention.
- (h) That a more comprehensive "adult probation law" be passed, giving school authorities power to compel parents to provide for the proper examination of their children, where such is deemed necessary and for the carrying out of the suggestions made after such examinations.

In view of the wide-spread interest in the questions of heredity and environment as affecting the present condition of the army of unemployed, your committee deems that the vital question of educating the young who may recruit this army is of paramount importance. This so-called "fringe of humanity" is by no means hopeless, but its hope lies in being understood and properly handled, so that the little all of the defective may be increased to its highest capacity. That this capacity will scarcely measure up to that of the normal child is evident, but that it may become creative and useful is the desire of all agencies for social welfare.

Concluding our survey of the Child Study Department, we feel that it is one of the greatest welfare aids in our civic life. We have found our task intensely interesting and instructive, and we believe we have enjoyed an opportunity for personal growth and

study in the duty you have assigned us. With deep appreciation for this opportunity, we are,

Very truly yours,

AGNES C. HEATH, Chairman.

MABEL R. FERNALD,
Chicago Normal College.

WILLIAM F. GINGRICH,
Head Asst., Headley School.

IDA L. JAEGER,
Principal, Brenan School.

JUNE H. MACCONKEY,
Principal, Emerson School.

FRANK MAYO,
Principal, Revere School.

JOHN T. MCMANIS,
Chicago Normal College.

SARAH J. O'KEEFE,
Principal, Beaubien School.

MINA S. SCHEURER,
Principal, Brainard School.

LOUISE SCHROLL,
Principal, Keith School.

MARY E. THRESHER,
Head Asst., Raster School.

MARY E. TOBIN,
Principal, Marquette School.

SUSAN A. YORKE,
Teacher, Tilton School.

PHYSICAL EDUCATION.

A survey of Physical Education as exemplified in the public schools of Chicago naturally leads to the noting of (a) the value of physical education, (b) the all-pervading influence of environment, (c) community hygiene, (d) the origin and development of the physical side of general education, (e) the academic or knowledge element in physical education, and (f) the formal and systematic training of the muscles by means of class exercises.

Value of Physical Education.

A single event in the recent educational history of Chicago, viz., the Child Welfare Exhibit, gave in most vivid and concrete form, the complete argument for more thorough and aggressive efforts to secure for each child the care and training necessary to develop all round physical well being. At that notable convention, pictures, graphs and models, spoke more effectively than libraries; and the "living" exhibit by classes from the city schools made an inspiring educational pageant. The co-operation of several cities in the preparation of the exhibition showed the deep interest of the general public.

Ways and means of counteracting the detrimental influences of complex city life are an ever present problem. A recognition of the value of a healthy body and its relation to a sound mind, has brought about the gymnasium. More and more, the schools throughout the country are recognizing its value and are expressing the fact in increased numbers of gymnasiums and in the increase in time given to physical education.

Much might be said in favor of each of the two general types of gymnastics, formal, and recreative. Neither is complete in itself. Both are necessary. Together they aid in physical, mental and moral growth. They bring about erect carriage. Round shoulders and sunken chests with their attendant functional disturbance give place to a bearing that shows intelligence and energy,—“a valuable business and social asset”. Through them practice in co-operation with others, fair play, generous acceptance of victory or defeat training, in inhibition and in prompt response are had; and the power of initiative, love of the open, of grace and beauty, are give chance for expression. They must aid more in teaching our people how to play, an urgent need. Too

often the machinery is left unused so long that when called upon it fails to respond.

The immigrant has brought his folk-dancing and through it he must feel himself of the great American composite. Dr. Gulick says: "It makes him feel that he 'belongs', that he is being recognized, that the old is being used in the construction of the new."

Effects of Environment.

The general truth, as stated by Spencer, to the effect "that the indirect and unforeseen results of any cause affecting a society are frequently, if not habitually, greater and more important than the direct and foreseen results" is also true when applied to individuals. Environment rather than volition and prescribed courses of training in our schools is possibly the more potent factor in the physical development of children.

Environment, especially in large cities, presents conditions and difficulties which must be met. Air, light, sound, housing and equipment require consideration.

Much good has been accomplished in Chicago schools during the past few years by means of the definite and often urged direction of the superintendent of schools to let air and light into the school rooms. Home-makers and school architects have not yet attained full realization of how much of both blessings is still outside and unutilized if our senses and statistics are to be believed.

In 80% of the gymnasiums surveyed, the air was too dusty, too dry, and of too high temperature to make the activities in physical education as beneficial to health as the department purposes. Experiments here and elsewhere have shown the presence of 500,000 to 1,000,000 dust particles per cubic foot in school gymnasiums which thus become a menace to health. Bacteria in washed air are reduced from 130 to 12. Accordingly, in the schools of this and other cities, the air should be washed and humified, before it reaches the pupils during the season requiring heating and ventilation.

The thermometer as placed at present at the side of the room, cannot possibly perform its offices for a large school room. There should be several thermometers placed variously at the level of the pupils when seated.

In order to eliminate the third great evil, dust, from the gymnasium, the first being foul, odorous air, the gymnasium and its contents must be kept clean. The mats have been reported rarely or never cleaned. In their present condition they are dustholders and dangerous to health. They should be cleaned every day by

vacuum process—perhaps even cleaned or sterilized. That much used gymnasiums can be cleaned thoroughly and kept clean is demonstrated in the small parks under the control of the South Park Board of our own city, who have developed an efficient service, (in each, two men being kept busy cleaning and fumigating), and have achieved a general condition of sanitary cleanness not encountered in the schools during this survey.

Engineers' efficiency should be rated in part upon the health conditions they discover and maintain in their building rather than upon lower fuel consumption which, when cutting down the supply of fresh air, is poor economy.

School room lighting has received intelligent care from architects who believed in factory windows and large lighting areas, and from the present superintendent who early during her administration asked the teaching body to give careful attention to the conservation of the vision of all pupils in their charge.

In the survey, Chicago has been found to have fewer dark or artificially lighted rooms than other large cities of the country. In twenty schools, only four rather dark rooms were seen and these were temporary makeshifts awaiting new buildings ordered.

The introduction of the adjustable, double or divided window shades has increased the light in the class room, perhaps 20%, the dark side of the room having been noticeably illumined.

The use of unglazed paper in school books is recommended, and the substitution of dull, unglazed finish on all polished, glazed surfaces of all wood work, and school furniture, in order to reduce eye strain; also the inspection of the printed matter used by pupils. (Influence of school books upon eyesight in Committee Report on School Hygiene, May, 1913).

Owing to the effects of noise upon the nervous system of pupils, and the educational waste caused by the loss of time resulting from noise, it is recommended that (1) new buildings be built at some distance from the street, that (2) double windows be placed near elevated roads, and (3) that mechanical ventilation, with cooled, clean air be furnished noisy rooms during hot weather.

Rooms for the lower elementary grades, as first and second, should be furnished like the kindergarten, which gives a sense of freedom to young pupils. In the higher grades the traditional method of seating should be discontinued. There should be several different sizes of seats in every class room, and these seats should be placed much further apart from front to back than at present, to protect individuals from offensive proximity. Adjustable seats are objected to because so rarely "adjusted". The fixed seats, if economy forces them upon our schools, should

have curved backs to conform with the backs of their occupants. A movable chair containing a book drawer and a swinging writing shelf would be a boon in school room furnishing.

Community Hygiene.

Much has been done in Chicago in recent years by co-operation with the Health Commissioner in the establishment of medical inspection for the prevention of communicable diseases. The results are apparent and the friction between inspection officials and patrons has given place almost entirely to a sympathetic spirit of appreciation. The influence of the school physicians and nurses in the poorer homes is becoming a service of the very highest value.

None of the several varieties of bubbling cups has been even fairly successful as an apparatus for serving a sanitary drink, because up to the present time no way has been discovered of regulating the water pressure when all the cups are in commission at recesses. Perhaps the cups are worth their cost, however, as an experiment and as a silent reminder that care in the matter of drinking is important.

Many toilet rooms are not properly cared for. This is true not only of the basement toilets in old buildings, but of the elegant and costly toilets in the newest of our magnificent buildings, both high and elementary. More of educational import is involved in this matter than has yet secured effective recognition.

The scope of this report does not admit full treatment of many items related to social or community hygiene which the school system of Chicago has already provided for or is considering. It is impossible to do little more than mention some of the more important. Fire drills have been thoroughly practiced for many years and on several occasions have proven their efficiency by prevention of a panic and probable consequent loss of life. With the new fireproof buildings and with every possible provision for safety in the older buildings, no pupil in Chicago is in any conceivable danger from fire. The danger from panic, however, in a large assembly under a single roof is always present. Moreover, the drills aid in the general control and movement of the various divisions of the school.

Other means of co-operative welfare at present established or under consideration are—segregation of defectives—social center activities—“Little Mothers Clubs”—outdoor gymnasiums, athletics, free and directed play.

Historical Development of the Physical Element in Education.

The treatment of this topic must necessarily be brief in this report, but the literature on this subject is both abundant and delightful. Members of the committee have thoroughly enjoyed Supervisor Henry Suder's "Brief Historical Sketch" in his last Manual; the very complete treatise "On Physical Training" by Dr. Edward Mussey Hartwell, published in Vol. 1 of the Report of the Commissioner of Education for 1903; Posse's "Special Kinesiology of Educational Gymnastics"; Sargent's Physical Education and many of the other intensely interesting books and reports easily within reach of the student of this most important phase of education.

In the early part of the eighteenth century, physical exercise began to assume an educational and hygienic aspect in Germany and began to appear, in various forms, in the schools of the European countries.

In physical education, as in almost every other subject of human interest, America has been the battle ground upon which the various theories of the Old World have come into conflict. With the tide of immigration has come a variety of ideas; Germans with the Turn Verein, elaborate gymnastics and heavy apparatus; English, with their boating, cricket, tennis and foot ball; Irish with their boxing and wrestling; French with their fencing; Swedes, with their free and light gymnastics; and all the nationalities with their characteristic folk dances. It remains for the American schools to effect a happy combination of the best elements of all; the strength of the gymnasium, the activity and energy of the field sports, the grace and suppleness of the calisthenics and the beautiful poise and mechanical precision of the free gymnastics.

Hygiene Teaching.

The Illinois School Law provides: "That the nature of alcoholic drinks and other narcotics and their effects on the human system shall be taught in connection with the various divisions of physiology and hygiene, as thoroughly as are other branches."

In Chicago the topic is placed in the department of physical education, an excellent series of text books is in use and the requirements of the law are fully met.

Gymnastics.

Gymnastics is the art of systematic training of the muscular system, its fundamental purpose being to make the body an ener-

getic and docile servant of the will. Strength and adroitness unite and become confident skill.

School gymnastics, especially in cities, are an important hygienic and recreational exercise, even where results do not nearly approach the ideals of any one of the so-called "systems." The controversies among advocates of various systems are becoming much tempered as attention is centered more and more upon what after all are the really desirable results of physical training.

The survey included the normal school, all of the 24 high schools, and 65 out of the 270 elementary schools. The impressions received are indicated by the following extracts from individual notes.

Chicago has been generously equipped with apparatus and gymnasiums in comparison with other large cities. What is most needed now is not more apparatus, but more intelligent use of what we have.

It is a late development with both Swedish and German systems to exercise heavily enough to get into a perspiration and require a subsequent shower bath as the English and Americans do so wisely, enthusiastically, and systematically. At the International Congress in Paris last year, the Danes won warm praise. Their system has introduced more joy and more team work into its activities. Their teachers teach other subjects and do not aspire to be close specialists.

In some rooms calisthenics do not seem to be given with any degree of system or of accuracy. The commands (which are supposed to come from the Manual) are not given alike. This is confusing to the pupil in passing from school to school, or room to room. Tactics sometimes are not carried farther than the formation of two columns even where there are large corridors. The dismissals in general were good. The pupils carried themselves well and tried to keep the march rhythm. This was especially true of schools in which there was a school orchestra or some one to play in the corridors.

It was a pleasure to go into *some* gymnasiums. The air was fresh and pure; the room was clean and the apparatus was *not* dusty. And in these schools, the activity of, and the benefit to the pupil was as great as that of the high school gymnasium. There is no question but that the use of fixed apparatus is splendid for muscular activity and therefore good health. In most gymnasiums all the apparatus is used sometime during the year, especially in schools visited every two weeks by a supervisor.

In schools where gymnasium suits are worn, the girls get

more out of the exercise. It is almost impossible to do any apparatus work in the present day attire and girls should be made to feel that the work is as good for them as it is for the boys. Suits are required in the high schools, why not require them in the grammar schools? The girls can come prepared for exercises on those days allotted for their gymnasium work and no time need be lost in preparation for the class. If there is an objection to boys and girls being together, separate into classes and take boys alone and girls alone. This gives them a better preparation for the advanced work in the high schools.

Class instruction is given in various games and in track and field athletics both in the high and elementary schools, but with the possible exception of base ball, an added zest is required to sustain the pupil's interest. Ball leagues and field meets with honors and prizes furnish this zest in the high school, but it has been thought best to prohibit all contests between elementary schools.

There is no inherent reason why the games children enjoy in the gymnasium should not be played in the school yard or in vacant lots, and the fact that they are not constitutes a strong argument for supervised and directed play. The growth of the playground movement is due to a realization that play is the business of childhood and that the city child does not know how to play. Of late the moving picture show has added to the passivity of his recreation. A duty no less urgent than that of conserving the child's health and strength rests with the community to inculcate in him a love for outdoor sport which shall be his physical heritage in after life.

Inter-school contests call forth the activities of only those who need the training least—those fairly well equipped physically—and lead to the evils attendant upon an undue emphasis on winning. There is need, therefore, that each elementary and high school be organized into groups of pupils who shall contend with other groups in the same school in all sorts of games. This can be accomplished only by having a playground at the school building with a play director on duty at the child's play time. In several schools where municipal playgrounds are adjacent, attempts to approximate this plan are being made. These would be more effective if the play director were under control of the school and if the play were an integral part of the school life.

The calisthenics in the rooms at seats with apparatus seemed to defeat the very purpose for which they were given, for the reason that the children immediately became tense, and seemed under a great strain caused by fear of striking the desk

or the apparatus in the hands of another pupil. Correct posture was very difficult to attain in this work on account of limited space. Rhythmical steps in all the lower grades were given. Tactics were given generally throughout the schools. We found some very excellent work. The pupils showed the effect of this drill in their marching at dismissals.

"That the heart of youth goes out to play as to nothing else in the gymnastic line" is obvious. This does not change as the child advances to the upper grades, for they find that play best satisfies all their needs. While receiving a great deal of exercise, they experience mental relaxation as well.

Folk and gymnastic dancing very properly occupy a place in our system of physical education. The rhythm of dancing and the music accompaniment relieve the muscular system to a great extent and give poise and balance so very necessary to boys and girls that are awkward and self conscious.

The effective direction of groups on a playground or in a gymnasium will have each pupil in active co-operation with his group. The great majority of children on the unsupervised playground simply sit about or interfere with the active group, who show some initiative in group activity.

Facilities for Physical Education.

Chicago is thoroughly in earnest in providing opportunity for both outdoor and indoor exercise. Small parks and municipal playgrounds are increasing even close to the center of the city, where space is costly.

The new normal school gymnasium, with its shower baths and swimming pool, is not surpassed elsewhere so far as your committee can ascertain. The latest type of high school, with a five or ten acre athletic field, is but little inferior, and some new elementary buildings have as a part of their regular equipment a swimming pool and a good gymnasium. Appointments such as these closely approach the ideal.

All of the 21 high schools have gymnasiums ranging from fair in the older buildings to superb in the new. Of the 270 elementary buildings, 47 have first class gymnasiums apart from the assembly hall, 52 have a good gymnasium outfit in the assembly hall, 25 have first class (new) combined gymnasiums and assembly halls and 26 have one or more vacant rooms fitted up with gymnastic apparatus.

The standard equipment for the various gymnasiums is as follows:

Equipment of elementary gymnasiums: 1. Giant Stride, 4

pairs flying rings, 6 traveling rings, 12 climbing poles on tracks, 4 rope ladders, 4 adjustable ladders, 2 pairs jumpstands, with cords, 4 short jump boards, 8 gymnasium mats, 2 sets of combination apparatus.

Hand Apparatus: 50 to 100 pairs Indian Clubs (according to the size of the gymnasium), 50 to 100 pairs of dumbbells with the necessary hooks for same, 110 wooden wands with two wand cases, 55 steel wands with wand cases.

Material for Games: 1 set basket ball backstops with goals, 2 basket balls, 1 set light bean bags, 1 set medium bean bags, 1 set heavy bean bags, 1 dozen beetles.

The list of apparatus for high schools differs very much from that of elementary schools. The old high schools were provided with one gymnasium, while the new high schools are provided with two gymnasiums, and each gymnasium is equipped with apparatus very much more varied and extensive than that furnished for elementary gymnasiums.

Need more be said about facilities? The whole gymnastic situation might be summed up by saying we are long on facilities and short in instruction.

Instruction in Physical Education.

Classes in the normal school are in charge of two teachers, the work is excellent and is especially adapted to the needs of young women—the new gymnasium will furnish ample means for more varied exercises and more periods of work.

The high school teachers, two to each building, are generally well trained. Their ranks are recruited from the more efficient of the teachers in elementary schools.

Both gymnastics and athletics in the high schools are very satisfactory. In field sports the tide is turning from excessive inter-school contests to the more generally helpful emulation between the classes of an individual school.

In the elementary schools some of the work is deserving of all praise. The possibilities are finely illustrated by a class in the gymnasium under a really skillful teacher, by specially prepared exhibition exercises, and in a few schools where a specially gifted teacher, or an unusually enthusiastic school faculty set the work in a high key.

Too often the work lacks system, continuity and vim. Nor are teachers, principals or any one else specially to blame. We simply have not yet reached the point where sufficient competent instruction is available.

Squarely face the fact that out of the 94 special teachers,

21 high schools get the best 45 and 270 elementary the other 49, and very little remains to be said.

General Recommendations.

1. Our schools should move in the direction of required courses in physical training that produce noticeable results.

2. Strengthen instruction in the elementary schools. In the light gymnastics or calisthenics, work more toward simplicity, accuracy and vigor.

3. Encourage school athletics by appointing field directors to relieve overworked gymnasium teachers.

4. Establish a department in the normal school for a thorough training of special teachers and supervisors and in that way supply the greatest need of our work in physical education at the present time.

R. M. HITCH, Chairman.

BERTHA BENSON,

Principal, Penn School.

KATE BESTEL,

Teacher, Brown School.

CLARENCE DEBUTTS,

Principal, Lowell School.

ELIZABETH A. GIBBONS,

Head Asst., Otis School.

A. E. LOGIE,

Principal, Walsh School.

GEORGE B. MASSLICH,

Principal, Wells School.

IDA M. PAHLMAN,

Principal, McCosh School.

MARY T. SULLIVAN,

Teacher, Jefferson School.

HUMANE AND MORAL EDUCATION.

The committee finds that the effort to educate the children along the line of morality, including its specific phase humane-ness, is finding expression almost universally through indirect means rather than through formal lessons. That this is right there can be small question, for, whether intellectual culture or moral culture be the goal, given a growing atmosphere, the individual develops the more surely, the less conscious he is of the end to be attained.

It is obvious that the changing needs of the growing child, his varying instincts and tendencies as he passes through successive stages of development, should be considered in selecting and arranging suitable material for moral training. The method of habit and imitation for the elementary child will lead into a more rational ethical conception in the mind of the youth. One part of our problem, therefore, is to fit the work we are doing to the various stages of school life: the post-infancy of the kindergarten, the period of gradual growth from kindergarten immaturity to adolescence in the elementary grades and the young manhood and womanhood of the high schools.

Unembarrassed by the necessity of imparting a definite amount of information the kindergarten bends its entire energies to the child's development. Here then, in the social life inherent in the kindergarten idea, is a rare growing season in which habits of acting rightly and courteously are woven into life. The songs, the marching in which one tries to fit himself to a given measure, the care of pets that visit or live in the kindergarten, the opportunities made for the older and stronger to help the younger and weaker, the story hour, the talks in which experiences are exchanged before self-consciousness hides the child's real conceptions from his fellows, are agencies well used, we believe, for moral growth.

In the first two of the primary grades the means used do not differ materially from those of the earlier years except as they are affected by the restriction of freedom in the child's life and the increasing complexity of aim in the teacher's mind due to the advent of the course of study. With the coming of the power to read, in the later primary grades, we find the children drawing inspiration from their readers, dramatization, and memory, gems,

and from supplementary stories of animals, their usefulness, their habits, and their relation to man. Anniversaries become interesting, and songs still do their work. Children's good impulses find expression in building bird houses and feeding the inmates, in caring for various other pets, and in one instance in helping to install a drinking fountain near the school. Oral and written composition affords a medium for the pleasant and profitable interchange of these experiences.

In grammar grades, history and literature, together with various publications devoted to child ethics, are full of suggestion. Lantern slides are found very generally helpful. Discussion leans increasingly toward the abstract, and such topics are chosen as the privileges and duties of citizenship, the laws for the protection of wild birds and other animals, and the means for securing humane treatment of horses. Clubs are formed to relieve suffering. Pupils are becoming acquainted, through their use, with the facilities provided by the Humane Society and the Anti-Cruelty Society for the care of injured or deserted animals.

The occasional instance among elementary schools of seeking to secure self-control and intelligent self-guidance on the part of the pupil through placing the discipline of the school under the jurisdiction of pupil organizations is worthy of notice. This practice is fraught with possibilities for good but not free from possibilities of evil. It is doubtful whether we are yet ready for its universal adoption.

In the high school, while the effort is continued to inspire the students with high ideals without ostentatiously pointing the lesson, there are also agencies which present to them directly their moral responsibility. Here they are intrusted with a larger freedom from supervision. . Team play in orchestra and glee club, and in social, debating, literary and dramatic clubs, brings them face to face with the need for fair play and for living up to the best that is in them. The recent institution of the office of dean of girls marks an epoch in placing upon a higher plane the social life of the high school student body. Instruction in practical hygiene helps the individual to become a self-regulated informed unit of society capable of performing satisfactorily the social and moral obligations devolving upon him. One high school has embodied its idea of moral education in a very practical system of pupil self-government under the plan of an elective student commission assisted by elective deputies in the various rooms and classes, the work being done entirely through the influence of public opinion and an attempt on the part of the commissioners

and deputies to impress upon others the fact that the school community is in opposition to anything that brings discredit upon the school body or upon an individual. Those who have handled young people know how powerful an influence this is. The commission takes charge of the following matters: 1, Attendance; 2, Public improvement; 3, Public health and amusement; 4, Public safety; 5, Public manners and morals. Under this organization, the good impulses of the student body have found vent in a quite remarkable system of outside philanthropic work, in which the students, besides individually investigating and relieving cases of poverty, co-operate, also, with social settlements and with organized charitable agencies.

The elementary pupil who is fortunate enough to enter the larger life of the high school finds each year increasing opportunity for reducing to practice the ideals which have been gradually fostered up to this time by his social life, his home environment and his inborn aspirations.

We have outlined the visible work being done in our schools along the line of humaneness and morality as the picture presented itself to us in our various visits, and the good influence of this work we believe is very strong. There is, however, in addition, from kindergarten to high school, another factor to be considered, another influence at work among our children, invisible and very potent. This is the daily right living of the school, which, under no guise other than fair play and the conscientious carrying out of the daily curriculum, develops, not teaches, the ideals that make for morality; natural opportunities for the exercise of courtesy and kindness being recognized and used, incidents of the children's own lives being so interpreted to them that right view points are gained, and the various class-room exercises being so conducted that the children do their work honestly for a long period before the temptation to do it dishonestly is allowed to confront them.

Physical well-being fostered everywhere through the gymnasium, and in congested districts through adequate bathing facilities and playgrounds, and the preparation for a generation of better homes through the domestic science work, lend themselves strongly to moral and humane development. And it is moral and humane development, not moral and humane teaching, that our children most need. The possibilities for such development are embodied in the spirit and attitude of the school, and vary among schools in proportion to the worthiness of the ideals which actuate the school faculty as they vary in the rooms of an indi-

vidual school in proportion to the worthiness of the ideals which actuate the individual teacher.

MARTIN SCHMIDHOFER, Chairman.

ISABEL J. BURKE,

Prin. Wadsworth School.

DELOS BUZZELL,

Prin. Belding School.

SOLON S. DODGE,

Prin. Chase School.

MARGARET S. FITCH,

Prin. Prescott School.

ALICE A. HOGAN,

Prin. Rogers School.

FANNIE L. MARBLE,

Prin. Hanson Park School.

ANNIE S. NEWMAN,

Prin. Mayfair School.

MARGUERITE L. O'BRIEN,

Teacher, Grant School.

CARRIE F. PATTERSON,

Prin. Bancroft School.

JEANNETTE J. ROBINSON,

Prin. Mann School.

SOCIAL EFFICIENCY.

At the beginning of this inquiry a questionnaire was sent out to all the schools, as follows:

1. What conditions or agencies at work within the school do you consider are most favorable to the development of:

(a) Initiative on the part of the pupils?

(b) The co-operative spirit (team play)?

2. Among the regular school activities, which in your opinion are most effective in these lines? In what way?

3. What special activities, if any, such as clubs, etc., have been inaugurated in your school? With what results?

4. What have you found to be the best means of developing loyalty in the pupils?

5. What improvements in conditions or equipment would you suggest as most urgently needed in furthering the development of social efficiency in your pupils?

Upon the answers to these questions, supplemented by information obtained individually from other sources, the conclusions of the committee are based.

The survey shows a very wide divergence in the amount and character of the organized effort being made along these lines. Some principals and teachers are keenly alive to the opportunities afforded in the school for the encouragement of initiative, co-operative ability and school spirit, and report a long list of activities,—administrative, legislative, scholastic and recreational,—inaugurated with that special end in view. Others, no doubt just as deeply interested in the development of these qualities in their pupils, confine the field of their efforts to the course of study and rely upon personal example and individual counsel to produce results.

This divergence is more largely true of the elementary schools than of the high schools, doubtless owing to the fact that the pupils in these grades are many of them under adolescent age, or just entering upon it, and still respond in large measure to the stimulus of kindly, if sometimes arbitrary, control. Most of the high schools report a wide range of organized activities, chiefly of a social nature, but many with athletic or technical requirements and aims. The reports from elementary as well as high schools indicate in many instances a more or less developed student government plan in successful operation.

It is a fundamental principle that the school is not an isolated institution, but must function in social efficiency if it is to justify its continuance as the main concern of parenthood, and of the state, the representative of parenthood. Because we live in an age which emphasizes the obligations of social service, we must be deeply concerned that not only the course of study, but the entire life of the school, be shaped to this end.

The environment in which the growing boy and girl spend those hours of the day in which all their powers are at the maximum should be such as to include opportunities for the fullest possible expansion, guidance and adjustment of those powers. The attitude of principal and teacher toward the child as a social being, the presence of a social as well as of an intellectual ideal in the management of the school and its activities, have as much to do with his education as any subject in the curriculum. All that is worth while in the superstructure must have its base and support in the subconscious life of the child; the foundations must be laid during the years when habits of mind and body are most easily formed. The application of this principle to the problem of the social efficiency of the schools forces us to the conclusion that we cannot begin too early to establish those qualities which help the child to adjust himself most fully to the environment in which he finds himself during the years of his pupilage, and which once established will continue to educate him in the power of adjustment when he emerges into the larger environment of life.

We have therefore considered the field of our inquiry, in both high and elementary schools, in four main divisions; namely:

- I. The Management of the School.
- II. Activities Related to but not Specifically Listed as School Work.
- III. Cooperating Agencies.
- IV. Equipment.

I. Management of the School.

It is a matter of general acknowledgment that the principal, and the principal and teachers, are responsible for the spirit which creates an atmosphere favorable to the development of cheerfulness, optimism and interest in the work of the school. Among the teachers, conferences, informal social gatherings, lunch clubs, special committees and various cooperative activities are encouraged by many principals as fostering a spirit which is reflected in the appreciative attitude of the members of the school toward the teachers and toward each other.

Active participation in the management and care of the school and school property also awakens interest and develops responsibility. This fact is widely recognized. Most schools have some form of monitor system; many have regularly appointed or elected custodians and other officers, and an increasing number have well developed systems of pupil government. The marshal who is chosen by classmates or appointed by the teacher to officer the ranks and to attend to the ringing of bells and gongs is helped by being chosen and through doing the work. In many schools the older boys and girls are encouraged to care for the younger children on their way to and from school and on the playground, and to take entire charge of corridors and basements. In one school a court or jury formed of responsible pupils, which tries habitual offenders against the school or public order and fixes their punishment, has been found useful. In a few schools the plan of pupil government in operation is modeled throughout upon our federal government, with regular elections. In others, appointments are made by principal or teachers. In all these the effort is toward the practical application of the laws of society and good government, which would otherwise be mere abstractions to the pupils. Executive ability and self-reliance are thus developed, also leadership, or the power to command, and an appreciation of the value of prompt obedience that is difficult to acquire in any other way.

II. Organized Social Activities Not Specifically Listed as School Work.

That the tendency of the modern public school is increasingly social is plainly shown by the long list of organized activities, more or less permanent in their nature, which are characteristic of individual schools. These are an outgrowth, in large measure, of the needs of the school and of the neighborhood. Literary societies have been for years a feature of the eighth grade work in nearly all our schools. Some schools report clubs of one sort or another in nearly every one of the elementary grades, and in the high schools, practically all student activities are carried on by means of formally organized groups of students or of students and teachers.

That the group and laboratory method of instruction, which has to a great extent supplanted even in the primary grades the old time formal recitation and memoriter work, prepares the way for more definite and independent cooperative work in the upper grades, is beyond question. Directed group work tends to satisfy the natural craving for companionship, to guide it into useful channels. It develops self-respect and self-confidence, a better

understanding of others and respect for their opinions. In club activities, poise, bearing and delivery are much improved by the practice afforded in public speaking. Latent talent is often developed, and a working knowledge of parliamentary law is obtained through actually taking part in business meetings. Among the older pupils the idea of working together for things worth while, when encouraged by public opinion and established by habit, tends to divert the "gang" spirit to legitimate and proper standards.

Law and Order Leagues, Civic Clubs, Clean City Brigades, Boys' Brigades, and various other school welfare organizations are increasing in number in both high and elementary grades. They direct specific attention to the principles of good citizenship, and awaken the realization that the individual as a member of society must work for the good of all in order to secure his own best good. They give play to individual powers of leadership and foresight, encourage disinterested cooperation and establish the individual's relation to community and civic problems.

Clubs for the avowed purpose of encouraging good deportment and good conduct in social relations and of improving manners and bodily carriage are successfully maintained in some schools. They are listed as Good Habit Societies, Good Manners Clubs, Courtesy Clubs, etc. They tend to establish habits of respect and courtesy toward schoolmates as well as toward elders. Mending and Gardening Clubs stimulate habits of industry and also aid the school welfare spirit. Anti-Cruelty and Audubon or Bird Clubs, by emphasizing the moral beauty of humaneness, react upon the character of the individual and help him in his relation with his fellows.

Story telling clubs are mentioned by some; Glee Clubs, Orchestra Clubs, Dramatic, Chess and Checker Clubs, Science Clubs, Tennis and Basketball Clubs, Outing and Camera Clubs,—the list tells its own story of the wide-spread recognition of the value of such organized activities. School periodicals, representing school and community interests, are indispensable adjuncts of high school co-operative life. They afford considerable scope for the exercise of business and executive ability.

Entertainments in which pupils take part, either independently or under the guidance of teachers, are in some form or other a feature of the activities of every school. The more definitely the programs of these entertainments are an outgrowth of the regular work of the school, the more perfectly they give play to the spirit of cooperation and social service, the more valuable do they become as agencies for social training. Pageants, literary

and musical programs, drills and "parties" reach their highest efficiency when they embody a definite educational or social idea.

Special mention should be made of the work now being done in directing the social activities of the high schools. The appointment of a dean of girls in each high school opened the way for more effective organization, closer affiliation with the academic departments, a more appreciative and helpful relation between teachers and pupils. At an age when the social impulses are likely to suffer for lack of guidance, students are brought into friendly and sympathetic association with a leader who understands them, and who offers the stimulus of an adequate social ideal and opportunities for its realization in wholesome ways. Space does not permit us to give any detailed account of this work, but it will well repay study, not only for the results already achieved in the high schools, but also for its possible bearing upon similar work in the elementary grades.

III. Co-operating Agencies in Social Efficiency.

School Alumni Associations have proved their value in many schools in preserving sympathetic relationship between the school and its graduates. Other organizations which aim to draw school and neighborhood together for mutual benefit are the Mothers' Clubs, Parent-Teachers' Associations, Little Mothers' Clubs, Cooking Clubs, Social Centers, etc. Social centers are valuable to all neighborhoods and should be established more generally. The wonderful success of the twenty-five centers already established is proof of this statement. The Projection Club carries a large majority of the schools on its membership roll. This club owns thousands of lantern slides which are used extensively by the schools holding membership.

Among helpful agencies cooperating with the schools is the Public School Art Society which loans pictures to schools for stated terms. The Academy of Sciences and the Harris Science Loan Association, connected with the Field Museum, furnish industrial and scientific exhibits to schools desiring them.

The City Health Department is co-operating with the schools through doctors' and nurses' visits, also through the dental clinics now being established in a few centers. These co-operating agencies are recognizing the fact that the growing physical organism must be made as nearly perfect as possible, in order that it may meet the demands of an increasingly complex social life.

The report of this committee would not be complete without mention of the very important use that the development of loyalty serves in education for social efficiency. Loyalty of pupils to their

schools is as natural as loyalty to the home. It is a spirit that, properly fostered, develops with the years. The most potent influence in bringing about this condition is the power of example. The loyalty of the school faculty to the Superintendents; of teachers to principal, of principal to teachers, and of all to the pupils; the support and cooperation of parents, all contribute to the result. One of the first things to be recognized by pupils is that the school to be worthy of devotion must do excellent work, and be in every way an institution to be proud of. Among the indirect means used in securing this spirit are: Uniformly just and courteous treatment of pupils by teachers, appreciation of effort with full credit for accomplishment in the performance of duty, and encouragement of initiative and public spirit in extra services for the school. More direct means are: The definite appeal to school spirit, in clubs and school assemblies; observance of patriotic holidays; salutes to the flag; formal talks on the lessons to be drawn from history, literature and current events. The work done by pupils in Civic Leagues and School Welfare Associations helps them to understand the relation between loyalty to home and school and loyalty to the State and Nation.

A danger to be guarded against is that of mistaking an emotional loyalty, which is purely superficial, for a loyalty which is character building. This discriminating loyalty, which holds individuals and communities to a definite ideal and which oftentimes requires the subordination of self, must be regarded as a definite part of the moral training for which the school is responsible.

IV. Space and Equipment.

The attitude of the school authorities toward this larger social functioning of the school is a determining condition of the school's social efficiency. Equipment or conditions merely furthering the school as an end in itself must necessarily fall short of the efficiency which is the subject of our survey.

Among significant facts for Chicago to face from either of these standpoints are:

1. Chicago ranks fourth among cities of the world in population.
2. Chicago ranks second to Boston among fifty largest American cities in per capita appropriation for public recreational purposes.
3. Chicago ranks twenty-second among these same fifty cities in per capita appropriation for public schools.

This means that to put Chicago on a parity with Boston for purchasing public recreational facilities, we need about \$1,100,000

more money annually; while to put us in the same class for school support, we need an addition of something over \$5,500,000 to our present budget, with twenty cities of the Union now ranking nearer the Boston standard than Chicago in liberality of school support.

In the absence of a due consideration of these data the suggestions for improvement in condition or equipment called forth by the questionnaire might appear excessive. But in the light of Chicago's status among American cities in available funds for public schools, these requests should be considered as only reasonable requirements.

While many buildings already include definite provision for social activities in the way of space and equipment, the survey shows that the distribution of these facilities is as yet very uneven throughout the city. Many schools feel that they have space and equipment enough, but that such activities as are recommended for social training require a special director. Others indicate that the space at their disposal is inadequate, as well as the supervision. Many feel that there are too many pupils to a teacher for effective work along this line. Certainly the problem of space is more easily solved than that of supervision. Teachers for such work must be specially trained. Their hours of service must be different from those of a class room instructor; that is, planned with reference to the needs of the gymnasium and the playground, and of neighborhood co-operation.

Among specific requests from the high schools the most general are for larger assembly halls, accommodating the entire school; adequate stage space, dressing rooms, etc.; rooms or halls for parties and entertainments; swimming pools, etc.; tennis courts; extension of privileges in regard to the use of buildings and grounds after school hours; instructors for dramatic and athletic clubs, school teams and school orchestras; and a fund to meet necessary expenses of parties and other purely social activities.

Among elementary schools the need most universally expressed is for playground space and for a special instructor for playground and gymnasium work. Assembly halls and gymnasiums upon the ground floor are very real needs, also more complete apparatus for games, etc. Garden plots, out-door gymnasiums, rooms for industrial work, libraries, store-rooms and closet space, adequate teachers' lunch and rest rooms, are among the specific requests. Indications are that many schools are utilizing to the full the space and equipment they have, especially the gymnasiums and assembly halls. They feel keenly, however, the handicap of poor acoustics and, in many cases, of insanitary and heavy surfaced cork

carpets, which make the floor unfit for dancing and other forms of gymnastic exercise. More bathrooms are needed, and, most of all, adequate hand washing and towel facilities in all schools. It cannot but be considered a grave mistake from the standpoint of social training, to encourage free play out of doors, games and gymnastics indoors, shop work and handwork of all kinds, involving the use of tools and plastic material, without providing at the same time means of satisfactorily cleansing and drying the hands before taking up other work.

Without a definite advance in the amount of our per capita appropriation for public education we are likely to be restricted in our social work for some time to come. Without a wider conception of the school as a growing social and socializing force it will be difficult for us to realize our ideals in any adequate way. And yet this survey of the work already being done with marked success in so many neighborhoods and schools augurs well for the future, and its continuance should be urged with the fullest encouragement and support from all interested in the development of social efficiency in the Nation.

LUCY S. SILKE, Chairman.

MARY SCOTT AXTELL,

Head Asst., Fuller School.

ELIZABETH V. BORTHWICK,

Head Asst., Irving School.

FLORENCE CURTIS HANSON,

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HENRY D. HATCH,

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MARY E. LYNCH,

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HELEN C. MAINE,

Prin., Davis School.

MARY E. VAUGHAN,

Prin., Audubon School.

MARGARET A. SHIRRA,

Head Asst., Logan School.

MUSIC.

The Committee on Survey of Music visited sixty-five elementary schools, twelve high schools, the Normal College, and two of the practice schools. The character of the work in about three-fourths of these schools was rated as Good or Excellent; in about one-fourth Fair; in only two or three schools was the work considered Poor.

The reception given to the members of the committee was everywhere the most cordial. Every effort was made by the principals and teachers to furnish the committee all possible means for observing the work. The quiet and inspiring manner of the teachers and the good order and courtesy of the pupils were a constant source of delight. The singing in a great majority of the rooms was of a high order. The children were obtaining an emotional education of great value. The power of music to unite the varying elements in the schools in a common purpose, to arouse the emotions, and to inspire to greater effort, makes the chorus singing one of the most powerful means of Americanizing the various nationalities, and of making all the children citizens of a greater republic.

It is a rare exception, however, to find all the children in a room singing in tune. The unregulated, off-pitch droning of those who are called "montones," of those who try to carry a part without being able to keep on it, and those who cannot control their voices—mostly the boys approaching the period of change—give to singing in many of the rooms a confused and untasteful effect. It may be that those of the young singers who feel and execute their music aright—and these are the great majority of them—are not sufficiently disturbed by discords about them to lose the pleasure of their singing and the inspiration of their music. Still, it does not absolve us from the duty of correcting this error, if possible.

Many think that it is necessary to permit unmusical voices to sing with the others, in order that by imitation the musical defects may be cured. If this is so, such singing should be limited to the exercises for drill and to the earliest stages of learning songs. When songs that have been fairly well learned are being sung for their value as music, voices which cannot carry the tune correctly should be permitted to remain silent.

The quality of tone has been improved to a remarkable degree in the last few years. The voices are uniformly soft and

quiet. Harsh, strident tones are the rare exception. The only criticism that could be made is this: In many classes the effort to obtain a soft voice has resulted in developing a breathy tone, which is lacking in vitality and carrying power. Vocalizing with full, round, open vowel tone the songs being studied, might remedy this defect without danger of producing the worse one, which has been so largely overcome.

The distinctness with which the words in songs are pronounced is gratifying. In most cases the enunciation is pleasing. In a few instances the effort for distinctness is manifested in an exaggerated action of the muscles used in articulation, thus leading to disagreeable facial expressions. Such faults as pronouncing Illunois for Illinois and the habit of leaving out the vowel in the terminations er, or, ar, ur, ir, making a sharp, hard sound of r suffice for both letters, might well receive further attention.

The plan of the Course of Study and the Music Department in the matter of reading is admirable. In the first three grades songs are taught by rote. In the second grade the syllable names of simple songs are sung by the pupils after the melody has been learned. In the third grade the pupils learn to follow the tone track on the staff. In the later grades the successive stages of note reading are skillfully presented. The skill obtained in note reading is not in proportion to the excellence of the program. The reason given for this failure is that the time available for instruction is very short. Perhaps more important reasons are that the recitations in note reading are chiefly in concert, and the work of a pupil in music does not affect his general standing. Concert recitation is recognized by all teachers as ineffective and wasteful of time in all other subjects, it should be so regarded in teaching the problems of music. It is not desirable that the promotion of a pupil should in any way depend upon his work in music, but it might be possible to prepare a series of steps or standards, upon the basis of which the musical ability of a pupil could be rated. This would give the student a strong motive for doing the work, and would put upon the teacher the responsibility of knowing what each pupil had accomplished. In most classes the teacher works skillfully towards obtaining a pleasing effect by the class. The accomplishments of individual pupils do not receive sufficient consideration.

One of the most serious problems and one which gives the teachers their most helpless feeling, is in connection with the boys' voices at the period of change. In the elementary schools the change has rarely gone far enough to give the boy any flexibility in the control of his lower voice or any considerable com-

pass with it. This fact, together with his unfamiliarity with the peculiar progression of bass parts, essentially different in character from the alto or soprano parts, to which he has been accustomed, make frequent failure of his attempts to sing the bass parts in the music assigned to him. Some of these boys sing the alto part an octave lower than it is written. This has an unmusical effect, even when correct in intonation.

RECOMMENDATION—It is recommended that in the training of these voices the plan outlined in the introduction of the Laurel Music Reader be followed. A man's "falsetto" voice, often referred to as head voice, has about the compass of the child voice. The boy who is gradually acquiring the man's voice need not relinquish the upper register, but may be accustomed to using both the upper and the lower registers, and to making the changes from one to the other readily and smoothly. Until the voice is fully settled the use of the two registers together should be limited to practice exercises, songs should be sung in one register at a time, some songs in the chest register and some in the falsetto.

In the primary grades the voices do not show register changes, and should not be carried higher than (say) E or F. At about the fifth or sixth grade the children begin to manifest a change in the vocal cords that makes it possible for all normal voices to produce the higher range of tones easily. The children in most of the rooms of these grades when tested became self-conscious when asked to sing as high as A flat. There should be a register change at about D or E. If pupils of the grammar grades are accustomed to vocalize above these pitches and become familiar with the register changes, they are more likely to sing with free throat than though the upper limit is put at F or F sharp, to which pitch they can force the voice without change. This sort of exercise with the voices of boys in the fifth and sixth grades will prepare them to make the more pronounced shift from the man's chest register to the "falsetto" or head tones referred to above.

It is of the greatest importance that the children be taught to sing with the mouth and throat free and open. A large number of children, boys in particular, sing with throat constricted and rigid, and mouth almost closed. The habit of singing in this way makes good voice building an impossibility. Careful guidance in this direction during the years of school life will avoid painful consequences in the way of voice defects during later years. Instruction to open the mouth is seldom sufficient. The effort to open the mouth widely is likely to cause the tongue to draw back

in the mouth, thus making the tone thin and hard. The more important point is to establish the idea of a full round tone. It is recommended that in the sixth grade and upward the full sound of *O* be employed to a greater extent than at present. This *O* should be exact in sound and formed with the mouth as widely open as for *ah*, say, the width of two fingers, with the tip of the tongue kept in place against the front lower teeth. If *E* is used in vocalizing and carried to high pitches, pupils should not be allowed to continue its thin, exact sound, but should be taught how to modify it on the high notes.

In every group of pupils there are a few who cannot readily carry a tune. This defect is by many classed as of the same order as color blindness. It should, however, be ranked with such traits as backwardness in arithmetic or reading. Pupils who are backward in singing should receive the same discriminating attention that is given to pupils who are slow in other subjects. The testimony of many teachers and principals is to the effect that with skillful treatment all, or practically all children can be taught to carry simple tunes. This would seem to call for much more careful instruction of such children than is now given in many of the schools.

HIGH SCHOOLS—Until quite recently the work in music in the High Schools has consisted almost entirely of the singing of songs learned chiefly by rote. An important advance has been made by the recent adoption of a Course of Study which calls for a technical knowledge of music. Teachers realize that the mastery of this knowledge can be brought about only by individual recitations, and an earnest effort is being made in this direction. It is too soon to estimate the value of the results. Apparently the work is too elaborate. Pupils are taught to define in technical terms things which few of them can readily exemplify. To conceive clearly of the effects of different kinds of chords in their various positions, and to sing those at sight, is of vastly more importance than to know their names. In the high schools and also in many classes in the elementary schools, the piano is too much depended upon in teaching the songs. This practice results in covering up defects which otherwise would be detected and cured.

The work with orchestras, glee clubs and choruses forms an important feature of the music in the High Schools. Much of this work is voluntary on the part of pupils and teachers. Some of the most efficient organizations are conducted by persons other than the music teachers. The following are reported

	Led by Music Teachers	Led by Teachers not Music Teachers	Led by Pupils	Led by Principal	Led by Musician from out side
Boys' Glee Club.....	7				
Girls' Glee Club	7	1	1		
Chorus	5	1			
Orchestra	8	4	2	1	1
Music Appreciation Club .		1		1	
Brass Band			1		
Choral Society		1			

Nearly every high school has given during the year one or more creditable entertainments. The programs have consisted of operas, among others "Martha" and "Pinafore", cantatas, as "Hiawatha's Wedding Feast", and other fine selections from standard composers.

The singing of the various organizations of the high schools is remarkable and worthy of the highest praise, except in those cases where a few girls are allowed in the choruses to sing alto loudly enough to balance a much larger number on the other parts. Alto notes lie very largely in the part of the woman's voice that is naturally the weakest. There are few genuine alto (contralto) voices which correctly produce strong middle notes. Consequently, voices of a lighter character are used for this part; and in order to sing with power, the young voices can hardly avoid forcing the chest register up into the middle range, a fault which, to the experienced voice trainer, is about the most deplorable of the whole category. Tenor voices, too, are scarce; and some who attempt this part are likely to do violence to their throats. The question is, shall we risk sacrificing a few voices in order to get the brilliant, striking effects aimed at in chorus singing?

Many of the leading members of the glee clubs and choruses are pupils who are doing exacting work in music with private teachers or in music schools. It seems reasonable that work done in this way should be given credit if the administrative difficulties involved could be overcome.

NORMAL COLLEGE—The aim of the Normal College is, (a) to give the students a thorough knowledge of the fundamentals of music, knowledge of and experience with materials used in the eight grades of the elementary schools, and to acquaint the students with the sound and effect of their own singing voices; (b) to instruct students what to teach and how, and what should be the reactions of the children. This second part of the course includes a study of the range, possibilities and training of the child voice, from the kindergarten through eight grades; the treat-

ment of the unmusical child, the changing voice and the changed voice. It includes further a study of the right kind of song material for children of various ages, and a consideration of what children might reasonably be expected to accomplish musically in the various grades, setting thus certain normal standards of excellence and power to be obtained. The above two courses are required of all students except those strictly unmusical. There is an elective course designed for those who are musically equipped. It includes an intensive study of the higher music forms, individual voice training, song interpretation, the acquisition of a musical repertoire. Students in their practice work conduct classes in music as in all other subjects. The students observed were well equipped in musical technique and presented the problems of music skillfully. They seemed, however, to give too little consideration to the reactions of the children and were content to accept listless and inaccurate responses from the classes.

MUSIC IN GENERAL—The Course of Study in Music in the elementary schools, the drills and exercises in voice training, in ear training, and in note reading provided, and the detailed directions for teaching prepared by the Music Department are admirable. There is need of additional exercises to meet the difficulties of new songs and to give further aid to part singing. When a new song is to be studied there is need of exercises specially planned to meet the problems of time and interval in that song. The classroom teacher usually has not the skill to formulate these exercises. They need to be provided for her. The difficulties of part singing are so great that it would seem wise to limit it to quite simple selections. There is great need for exercises to teach the special form of progression of the bass parts to boys who are just beginning to use the man's voice. The entire field of music has been searched to find material to fill and to supplement the text-books. It is questioned whether the list offered is not too long; whether teachers should not be given a more careful guidance in the selection of songs. Instruction in the technical phases of music is of great value and should receive careful attention, but of much greater importance is the cultivation of the taste for good music and an acquaintance with the best in the literature of music.

It is recommended that the work in singing be so conducted that the pupils will become familiar with the best songs extant which are suitable to the range of their voices and their ability to execute. They should know these songs so well as to thoroughly enjoy the pleasure of singing them. The list might well include all of our national and patriotic songs, a wide range of folk songs,

and a carefully selected list of other songs chosen for their poetic and musical excellence.

The minor mode, so important an element in the higher class of music, is scantily provided for in the books now in use. We have observed some uncertainty in the singing of the few minor songs that are used, which indicates a lack of familiarity with that mode; and for the sake of these songs as well as for its cultural value we recommend that more attention be given this element.

For systematic development of the technical work, the Lyric Music Books are carefully constructed. The musical quality of the songs is not as high as is desirable. The supplementary song material provided by the Music Department is valuable. Its value is greatly lessened by the form in which it is presented. It is recommended that when a song or set of exercises is to be sent out, it be printed and furnished in sets of 50, so that one copy may be put into the hands of each child of a division. Otherwise the song must be taught by rote, or must be written on the blackboard. Writing the music of songs on the blackboard is wasteful of the teacher's time, and singing from music so written is unsatisfactory. Best of all would be a book containing all the songs, exercises and drills. When the subject matter of a study is put in convenient shape, it will be used. So long as the best of it is scattered through many books, booklets, leaflets and mimeographed sheets, it will not be used advantageously.

The assembly songs serve an admirable purpose. In about two-thirds of the schools visited, they were carefully studied. There are still many variations in the time. Many teachers think that the number of songs sent out each year should be reduced.

The high general average of the work has already been noted. There is, however, in the schools a wide and inexcusable range of excellence in musical attainment. There is no satisfactory reason why there should be the divergence in results indicated by the following reports, which concern two schools having practically equal advantages.

School A: Voices—excellent; musicianship—excellent; notation—excellent; tones kept sweet and natural throughout grades; excellent leadership and good development of rhythm; reading by individuals, groups, and classes showed progress from grade to grade; excellent spirit and love of music shown; monotones practically eliminated.

School B: Voices—fair; musicianship—fair; notation—poor; many teachers had musical ability; singing—ineffective; many monotones; no attempt to secure better tones; no agreement as

to correct pitch; piano used too much; teachers could not conduct effectively while playing accompaniment; assembly singing ragged.

It is highly desirable that the work of all schools be made equal to that of the best. To attain this end, it may be necessary to provide a greater amount of expert assistance from special teachers. It is essential that certain principals and teachers acquire higher musical standards. This may be brought about in various ways, one of the most important of which is the visiting of schools and classes where the work is of a high order. The phonograph is in use in many schools and furnishes an excellent opportunity for developing standards. Excellent work is found in schools where the music is taught departmentally and also where it is not so handled. In cases where the latter situation exists, the principal usually has particular skill in guiding the work. Ordinarily, it would certainly be more economical to place the instruction in music in the hands of those who can do it most easily.

The teaching of music in the public schools is given not only to those who are gifted in this art, but to all children. The work is done not by trained musicians, but by teachers of general culture. Judged from these two points of view, the work in the Chicago public schools is of a high order.

CHARLES D. LOWRY, Chairman.

FREDERIC W. ROOT,

CHARLES S. BARTHOLF,

Principal, Goethe School.

FELICITAS J. BINNA,

Teacher, Schley School.

FLORENCE U. COLT,

Principal, Libby School.

ABIGAIL C. ELLINGS,

Principal, Greeley School.

LUELLA HASTINGS,

Teacher, Armstrong School.

FLORENCE HOLBROOK,

Principal, Forestville School.

THOMAS C. JOHNSON,

Principal, Haugan School.

NETTIE L. JONES,

Teacher, Crane Tech. High School.

CHARLOTTE L. MITCHELL,

Teacher, Wicker Park School.

FREDERICK M. SISSON,

Principal, Doolittle School.

TRAINING OF TEACHERS.

The Training of Teachers for the Chicago public schools is divided into three parts: (1) The Chicago Normal College, (2) Three Practice Schools, and (3) A period of four months' cadetship in the elementary schools of the city.

In organization, the Chicago Normal School is comprised of the following:—(1) Chicago Normal College and three Practice Schools; (2) Normal College Extension; (3) The Library; (4) The Press. The Practice Schools are representative of a fairly wide range of school conditions. One—the Haines Practice School—is located in an industrial section of the city; the other two—the Parker Practice which adjoins the College and the Carter Practice—teach children from fairly representative American homes.

Four undergraduate courses are scheduled and conducted for training teachers in the Normal College: The Elementary Training Course; the Kindergarten Training Course; the Industrial Arts' Training Course; and the Household Arts' Training Course. These courses are outlined to extend over a period of two years' training, making it necessary for graduates to satisfactorily complete 1720 hours of work, and to give approved evidence in their practice and cadet duties of ability to teach children. In addition, two graduate courses are given,—one for the Oral Instruction of the Deaf, and another for the Instruction of Crippled Children.

The courses prescribed by the Normal College are presented by seventeen departments as follows: Educational Organization, Education, Psychology, English, Oral Expression, German, History, Mathematics, Science, Physical Education, Art, Industrial Art, Music, Kindergarten, Oral Instruction for Deaf, and Household Arts and Science.

The practice teaching is required for the last semester of the second year of all courses two hours daily, twenty consecutive weeks, ten consecutive weeks with one group of children and ten with another in a lower or higher grade; the two hours daily to be devoted by the student to teaching continuously the same subject and to observe the training teacher instruct the same group in one or more subjects. The practice work is assigned by the faculty of the Normal School. Before entering upon it the practicing student submits to the head of the department in which her assignment falls a plan for the ten weeks work. She is directed

and guided by the critic teacher and by a member of the faculty. Therefore, the point of convergence of all the students' training is represented by this actual practice in teaching children and it will be seen that the critic teachers of the Practice Schools play no small part in giving point and efficacy to the whole course of training. The intermediary channels through which the influence of the Normal College training flows are the courses in Special Methods given by the several departments, affording a direct opportunity to unite the theory and practice of the Normal School with an interpretation of the subject-matter which the amateur teacher must handle in the future.

The undergraduate student-body is selected by examination prescribed and conducted by the Board of Education with the exceptions hereafter noted. For admission to the final examination, a candidate must be at least 16 years of age and file an official statement that he is a graduate of an accredited Normal School, or a regularly matriculated student of at least one year's standing in such institution; or a graduate of a public high school in Chicago; or a school of equal grade. Institutions other than the public high schools of Chicago are to be accredited as of equal grade with them upon presentation of an official statement showing a course of study and an administration of said course equivalent to that adopted by the Board of Education for the Normal College Preparatory Course.

Former teachers in the public schools of Chicago, graduates of accredited colleges and universities, and such Cook County high school graduates as are recommended by the County Superintendent of Schools are exempt from the academic examination, although, in common with all other entrants, they are required to pass a physical examination. Students admitted to graduate courses must either have completed the undergraduate course in the school itself or must be teachers in the public schools of Chicago whose efficiency records are good, excellent, or superior. Advanced standing of one year is accredited to former teachers in the public schools of Chicago and to others certified as completing a two years' course in an accredited normal school, college, or university. It will thus be seen that there are large possibilities for variety of interests and for inequalities of preparation of the entrants, all of which raises a group of problems that insistently obtrude themselves upon the attention of their instructors. As a matter of fact, a determination of the sources providing the graduates for nine successive years shows the following distribution:

Year	Public High Schools	Parochial High Schools	Former Teachers	University Graduates	County High Schools	Total
1905	50	83	8		7	98
1906	83	48	12	7	6	156
1907	134	47	3	2	47	233
1908	127	77	2	13	9	228
1909	147	80	4	21	3	255
1910	144	96	4	13	10	267
1911	198	107	7	13	8	333
1912	139	87	4	13	5	248
1913	145	100	2	22	10	279
Totals	1167	675	41	104	105	2092
Per Cent 9 years...	56	32	2	5	5	

Had your committee sufficient time at its disposal the plan would have been carried out of finding to what degree graduates of these respective preparatory institutions were fairly representative of their class-mates, or the school as a whole, in scholarship and in promising personal characteristics for the profession. The only data ready to hand at the present came from the principals of the public high schools from which those entrants graduated, giving an expression of their own estimate and of the faculties of the schools, as to whether those who elected to enter the Chicago Normal were superior, equal to, or below the average of their class in the following respects:—(1) Scholarship, (2) Ability to lead or play a co-operating part in high school activities, (3) Social standing in student-body as rated by school-mates, (4) Personality and personal appearance.

The reports of 15 schools are recorded and in these the following is indicated: With respect to scholarship, seven of the number believe that the entrants are below the average; eight report that they are equal to the average, and of this latter number three of the schools assert that a small proportion—about one-third—are superior, while the remaining two-thirds reduce the group to about the average ranking. In power as expressed in ability to lead or play a co-operating part in high school activities, four schools assert that their graduates choosing this means of entering the profession of teaching are below the average; nine schools state that they are equal to the average, while again two schools each have a small body included in this grouping that are superior in the characteristic noted. In social ranking by their school-mates, five schools report the entrants below average; ten schools assert that they are equal to the average and again in three schools are to be found a small proportion that rank with the best. In regard to the elusive characteristics of personality and personal appearance, six schools declare that normal entrants

are below, while nine maintain that they are equal or superior to the average of their mates.

Of course, such a rating depends throughout on the character of the community in which the different schools are located, and for this reason no attempt was made to compare the clientele.

Passing on from this survey of the process of admission and the consequent quality of the original material furnished to the institution, we endeavored first, to get some indices of the efficiency and workings by observation of the institution in action, and secondly to secure some records indicative of the success of the students working under the actual conditions for which they had been prepared. Further, it was thought desirable to collect any other data that might assist us in evaluating the efficiency of the institution in terms of its products, as well as to call attention to any factors, other than the quality of the student-body referred to, that might intercept the transmission of its best influences in the elementary schools.

For the purposes of visiting the institution to observe what and how these students were taught as well as to note how this training was carried out in practice, the committee was divided into ten sub-committees to review and report on a single department, or a group of more or less allied departments. Because of the diversity of organization and procedure of work necessarily obtaining in departments, as well as to insure against the employment of merely general descriptive terms, it was deemed advisable to report the results in separate form though roughly conforming to the points for notation agreed upon in advance.

Educational Organization, Education, Psychology.

Your committee visited several of the college class exercises of these departments. According to evidences in the class room, the question somewhat naturally arises as to the wisdom and advisability of requiring the distinctly technical information in the foundation course so early in the training career of such immature minds. The attitude of students in a fourth semester class in general Psychology which was visited was more hopeful. All members of the class were alert and thoughtful throughout the hour. The questions and suggestions were closely related to the students' experience and pointedly directed toward her future. In the class exercises in Education, it was evident that the students were thinking closely upon their experiences and looking intently into the future when they would be actively engaged in the work of the school room. Further, in another class exercise dealing with modern extensions of the traditional work of the school, it

was evident that the professional view-point of the teacher as educator was being developed.

For the first year in the Normal School, 820 hours of work are offered. Of these, 120 hours are devoted to psychology and ethics, designed to give the students insight into the attitudes and mental movements of children sufficient to furnish criteria for selecting and organizing subject-matter for presentation to pupils in the different grades of the school. The remainder of the time, 700 hours, is given to a study or review from the teacher's standpoint of subjects ordinarily taught in the elementary schools:—English, Geography, Mathematics, Science, the Arts, Oral Expression, Music, and Physical Education.

The theory of the course is that the psychological side will find its expression in the reorganization for teaching purposes of the subject-matter of the academic studies. In practice this reorganization may or may not take place. Young teachers teach largely according to habit. At least in the crises of their work, it is habit that comes to the front and carries them over their difficulties. They teach as they have been taught. If the academic studies as they are taught to these students do not exemplify the principles of psychology, if the subject-matter as presented to these girls has not itself been psychologized, the psychological side of this first year's work is likely to have little effect upon the subsequent teaching work of these girls.

How far the psychological departments influence the organization of the subject-matter presented to the students in the academic studies, your committee had little opportunity to judge. We did, however, visit a few classes and are of the opinion that the connection between the two sides of the student's work ought to be closer. A prominent part of the year's work on the side of method is practice work in the schools. The committee visited several classes taught by these student-teachers and is of the opinion that these girls should have more detailed help in arranging their work before attempting to present it to the class. One student was teaching work which she, herself, had never had. Another was working from a plan which might profitably have been used by a class in advanced high school. Others were teaching work which they had taken in the Normal School and appeared to have well digested plans. From our investigations it would appear also that the special methods classes which go along with this work are too general in character to be of the greatest help to these students. Your committee is also of the opinion that these students should have the opportunity of seeing a great deal of good teach-

ing and of discussing its merits and demerits before entering upon this trial work on their own account.

Our suggestions may be summarized as follows:

1. The work in the psychology and method subjects should be such as will give the students direct help in interpreting the attitudes and activities of children, and in organizing school activities to assist and stimulate normal growth.

2. The psychology department should have a greater influence upon the work done in the academic studies.

3. The work of preparing the girls for their practice work and of assisting them while at that work should be more carefully organized.

English:

Four classes in the Normal College and eleven rooms in the three Practice Schools were visited. The subject-matter in this department is offered to students in eight courses, two of which are prescribed while the other six present a wide range of electives. In the foundation course in English, one hundred hours are spent in (1) oral and written composition, (2) reading for informational purposes and literary cultivation.

The work in oral and written composition took the form of a discussion by the class, which kept close to the past experience and future needs of the students. The questions asked by both instructor and students were direct and intelligent, and helped to clear up the subject under discussion. A careful summary was made at the end of the exercise.

One hundred hours are devoted to the study of "English in the Elementary School." A careful selection and organization of material for elementary work in reading, composition, word-study, and grammar has been made. A practical application of the work was seen in the three Practice Schools visited. Class exercises in the "Technical study of English" and in "American Literature" were likewise observed and although the subject-matter was from the academic point of view superior yet the exercises were not so adapted to the capacity of the students' past experience, nor so happily applicable to the ultimate purposes for which the training is taken.

Oral Expression:

Forty hours are given to (1) practical phonetics, (2) mechanism of speech, (3) correct formation of English language, etc. One hundred hours are devoted to the study of oral interpretation of literature, principles of expression, and the selection of materials for reading aloud. The classes visited in the

above subjects were exceptionally good. The oral reading showed excellent results in enunciation and articulation. The expression was pleasing and the vowel work notably good. The material selected was both interesting and instructive and the work carefully planned. The greater number of questions were asked by the teacher but they related to the subject under discussion and had a definite purpose.

German:

The German Department offers four courses: (1) Grammar and History of Literature, (2) Special Methods, (3) Methods of teaching German, (4) Training in the use of the Spoken Language. The instruction given in all of the German classes was excellent. The suggestions of the teacher quickly brought out both the strong and weak points in the recitation. The pupils were alert, interested, and well prepared. The students were gaining high professional standards while doing work which would be of actual, practical value to them in the handling of pupils.

History and Geography:

The committee visited all the Normal College classes and fourteen practice classes in the three Practice Schools, directing their attention to the following points: In the department of history, one course is required and three electives are offered in addition to the course in Special Methods. At the present time there are no classes in the elective courses and the required course on "Constitutional and Industrial History in the United States" is prescribed for the second year of the Elementary Training Course. In the department of geography, there are two courses required and two elective. Of the former, the foundation course is demanded as a part of the training of the first year of Elementary Training Course and the major portion of it in the second year of the Kindergarten Training Course. The course in Special Methods is required of students during their term of practice in teaching geography, or the second semester of the year. A class which had elected the course "The Geography of Chicago" was visited. No classes were found in the elective course "The Geography of Commercial Products." With regard to the class work in history, the plan is academic, there being no special reference to problems of presentation and method although many suggestions might be gained from the good example given in planning and conducting the class period.

In all the practice classes that the members of the committee visited, the pupil-teachers were in charge of the class

work. The critic teacher gave helpful suggestions immediately if she considered it advisable to do so, but otherwise she simply made notes at the time and reserved her criticism until the class period was over.

Mathematics:

Four days were spent by the committee at the Normal College and Practice Schools. In the former, two classes were visited—one in the first and the other in the fourth semester. While the instruction was excellent, the instructor's questions clear, and, to a student with a mind keen to learn, thought-provoking, the students did not impress the committee as being alert to their advantages. Although the lessons were topical and definitely assigned in advance, many of the students were poorly prepared. It is suggested that some means be devised for informal or formal observation of expert teachers of children earlier in the course. In the practice schools, recitations by student-teachers in the second, fourth, fifth, and sixth grades were observed. The student-teachers seemed well prepared. They understood the use of the appliances at their command and presented the lessons clearly. The recitations showed carefully worked-out plans and were methodically given. The critic-teacher never manifested any impatience toward the student-teacher and she reserved any specific criticism until the class was dismissed.

The class in Special Methods was composed of students who had been in the Practice School less than two weeks. The questions which they prepared and submitted to the instructor showed a thoughtful attitude of mind toward the work they were doing. The students seemed to be getting some psychological methods of approaching the subjects under consideration.

Science:

The Department of Science offers eight courses. The aims of this department are,—(1) To develop the scientific attitude of mind, (2) To impart a knowledge of some of the common things of every-day life, (3) To be of immediate assistance to the students in their practice teaching of Nature Study, (4) To give the students in the Household Arts, Industrial Arts, and Physical Education Courses some science work which will be useful in their special fields. On the whole, the work of this department is based upon a clear understanding of what is desirable and possible of accomplishment in the elementary schools of the city.

Your committee visited three college classes and in two of

these excellent work was being done. In the third class the work seemed to be entirely foreign to the former training and present interests of the students.

The students in the class for Special Teachers of Household Arts were working in the second semester of the Household Arts Course. The previous academic training of the students seemed to have been adequate. The problem under discussion grew out of laboratory work dealing with the heat values of various fuels, the chemistry of combustion, etc. The information acquired will be of little value to the teacher, when she comes before a class in cooking. However, the discussion did have a good deal of cultural value to the students themselves, and it is to be hoped that the instructor's very skillful handling of the problems will have its effect upon the future work of these teachers. The students enrolled in the class in Botany were in the first semester of the course. The academic training of the students before entering the Normal School seemed to have been very diverse and in most cases very inadequate. The class discussion was definite and closely related to the future needs of the students. The instructor was giving definite preparation for the teaching of Nature Study in the Practice Schools, as the course was outlined to the committee by the head of the department. This instructor was also doing some excellent work in oral English. The practice teaching of students one year ahead of the pupils of this class, showed the good effect of the academic work done the previous year.

Physical Education:

One foundation course on elementary physical education is required in the Elementary and Kindergarten Training Courses respectively, designed to develop the student-pupils themselves and to acquaint each of them with adequate gymnastic material and play activities for use in the public schools. Half of this is given in the first semester and half in the second. This is carried on further in the Special Methods course while two advanced courses are presented for the choice of certain groups desiring them.

Your committee listened to an excellent discourse adequately illustrated on proper position in standing and walking. This was subsequently supplemented by testing exercises for each student and afterwards a group-drill to music was indulged in. The procedure throughout was very commendable. Two practice classes were visited—one in second grade and the other in fourth grade. In each case a critic teacher was present, giving no directions nor

suggestions until the student-teacher had finished. The classes were then taken by the critic teacher, thus giving the student-teacher the opportunity to observe work in the hands of an experienced teacher.

With regard to suggestions, we hesitate to speak of the lack of space to adequately carry on the work. The much-needed gymnasium which is nearing completion ought to meet all necessary requirements for the good work of physical education. It would seem highly advisable to have a resident physician at the school not only to remedy slight ills that arise and to guard and protect each student against undue strain, but as well to insure for each student-teacher the necessary advice in the correction of physical faults in herself and some instruction in the diseases and defects of children.

Art and Industrial Arts:

Eight course are offered, three of which are required—one on "Design, Bookbinding, Textiles, or Woodwork," and another, supplementary, for the student not taking music to be taken in the first year, and further, the course in Special Methods is required during the student's term of practice teaching. The committee visited one class in crocheting and knotting, working from previously prepared drawings and designs, which was well conducted. Another class in woodwork was seen in operation. The material for class work was first discussed and subsequently the students proceeded to work out their series of problems. Another class in the same subject-matter was seen at work wherein no apparent prescriptive directions were given, but it was plainly evident that the subject-matter was well handled. Still a fourth class was observed at work, consisting of a rather small group of young men students wherein they were intelligently discussing material to be subsequently used in working out problems. A fifth class was visited in the Department of Art, which had under discussion house decorating and furnishing. Each person in the class had previously prepared, under direction of an Industrial Arts' teacher, an ideal house. At this point the Department of Art took up the work relative to decoration and furnishing. This co-operation of the two departments was very noticeable in the greater part of the work planned, and cannot be too highly commended. At two of the practice schools seven classes conducted by pupil teachers were observed. Of those practice-exercises six of the seven classes were well conducted, planned well, vigorously carried out and illustrative of the methods taught them.

The work observed was, on the whole, so conducted as to develop teaching power and ability in the students, although the causes that prevent these young graduates from carrying these good influences into the school room are not so easy to point out. The housing for classes and in some respects the equipment is poor, but the new Arts and Industrial Arts building, nearing completion, ought to give ideal quarters and opportunities.

Music:

The foundation training course in musical technique required of all students in the Elementary Training Course is divided into two parts. Forty per cent of the whole is required in the first year of the Elementary and Kindergarten Training Courses and the remainder is prescribed for the second year of the former course. An excellent opportunity of bridging the academic work and the practice teaching is presented in the course on Special Methods. Further, for those so electing to pursue the study further, a course covering one hundred hours is outlined on Music Appreciation. Sixteen music recitations were observed and about an equal number of practice teaching exercises. On the whole, the work in the college courses was well given and appreciated, indicating the beginning of power to adapt the material to class-room use, and to regard the teaching of children in a professional way. In their practice teaching these students markedly showed the influence of the instructors. It was further noted that the critic teachers assumed a helpful attitude toward the student-teacher. Valuable criticisms of their efforts were made and demonstrations of how to teach were offered them. The following suggestions are submitted: 1. Undoubtedly more confidence and self-reliance could be engendered were the opportunity given for more practice work. 2. It is believed that only talented students should be expected to teach music in the elementary schools in the 6th, 7th and 8th grades. 3. Less technique could be given to all students except those following the special course. This extra time could be used for practice work. 4. It would be highly desirable to conserve and develop the talented students for departmental music work in the public schools.

Kindergarten and Oral Instruction for the Deaf:

The Kindergarten Department conducts, with the assistance of the general academic corps of the Normal College, a distinctive training course, requiring for graduation the same total number of hours' work as demanded by the Elementary Training Course. In the Kindergarten Department proper, two hundred

and fifty hours of this work are required during the first year and an equal number of hours, including the double time allotted in the special methods, is given in the second year. In all but one class the work of instruction was good, and this adverse comment refers only to the fact that a great deal of indefiniteness was noted in the responses of the students. Moreover, in observing the work of the student-teachers in practice, it was noticed that all the general or circle work was done by the critic teachers. The work in itself was excellent, but it is our opinion that some of it, at least, should be done by the student-teacher. The instructors were, in every instance, capable, efficient and sympathetic, and might be more helpful if permitted to see and criticise more of the work of those under their charge.

The Department of Oral Instruction for the Deaf likewise gives a special course designed to prepare students for this work in the Elementary Schools of Chicago. Until the end of the first semester of the present school year it was catalogued as a graduate course which required for admission thereto either the completion of the elementary training courses, or for former teachers in the public schools of Chicago an efficiency standing marked at least "good." Formerly the additional year required was devoted exclusively to this specialized training, and required four hundred and twenty hours in all. The school has had, since the establishment of the Training Course, small success in inducing students to take the course, because of the difficulty of the work and the three years required for graduation, but since the inauguration of the policy of the two-year course, a promising class of four students have elected this training. The academic work, which is almost inseparable from the practice, was well conducted. The practice work with the student-teachers was carried on with individual children. No regular critic-teacher work was seen, although by this we do not mean that none exists.

Household Arts and Science:

This department gives a two-year course with twenty weeks' practice work in sewing and ten in cookery. Six classes were visited at Normal College and eleven at Practice Schools. The class work is admirably planned and carried out, the instruction being closely related to the future use of the student, both in the regular class work and in the Special Methods.

The course in Planning, Decoration and Maintenance of the House, given in co-operation with the Arts and Industrial Arts Department, is to be commended. The course in Millinery adds to the practical work in Household Arts.

With the large enrollment in this department assistants would be needed to enable these instructors to give more time to the supervision of practice teaching. The attitude of the critic teachers toward the practice teacher was found to be very helpful, never fault-finding. The discussions and general attitude of students in class exercises were indicative of efficient teaching.

Several of the students were visited during the first or second lessons presented by them in their practice work, a truly difficult position for them. Their ability to present the lesson as planned and the results obtained were extremely commendable. Others were visited during the last week of their practice work. These showed by their self-reliance and by the finished work of their classes that they had to a great extent overcome whatever difficulty they may have encountered at first.

The large membership of the present class makes it impossible for each member to have her full practice time. If the large membership continues, more provisions for practice work should be made in this department.

To supplement the reports made in observations of the Normal School, your committee outlined an extensive plan of getting some comparative indices of the efficiency of the work of graduates in actual teaching service in the schools by determining:

1. The efficiency rating in teaching for five years as compared with their Normal School standing, their grade on entrance examination, and previous to that their high school records.
2. The rating of each graduate for the past five years when placed on the eligible list for assignment, at the end of her four months' trial-service or period of cadetship.
3. The efficiency ranking of each student of the foregoing at the end of her third year of teaching.

With reference to No. 1, the time at our disposal was not found adequate; and likewise for No. 2 and No. 3 in toto, so that only for two years of our contemplated task were the graduates followed up individually in their service of teaching. While aware of the complexity of factors which are operative, due to the entrance of difficulties and dangers in transmuting the descriptive terms of "inefficient," "fair," "good," "excellent," and "superior," employed in teachers' markings, backward into the percentage rankings on assignment, and further because other things being equal, we should expect rankings to advance with increased experience, nevertheless, without going into detail we must affirm that the tendency is for these young teachers to continue climbing and rank with the best, while at the other

extreme, there is no downward current and no failures are noted in the individual cases followed.

One of the most obvious questions that arises concerns the number of teachers furnished by the Normal School in comparison with the needs of the elementary schools of Chicago. The following table is submitted covering a period of ten consecutive years:

Year	Number of Assignments to Elem. School Positions	Number of Normal School Graduates	Per Cent Supplied by Normal School
1903-04	520	74	16%
1904-05	442	92	20%
1905-06	465	130	28%
1906-07	464	193	41%
1907-08	401	219	54%
1908-09	420	261	62%
1909-10	343	270	78%
1910-11	367	346	90%
1911-12	408	245	60%
1912-13	465	215	46%
Total	4295	2045	

One must not infer that these numbers for each year are directly representative of supply and demand. A period of cadetship intervenes between graduation and assignment, and, inasmuch as all persons on the eligible list are ranked and assigned in order of merit, a period of delay often ensues, much more noticeable in former years than at present, due to the existing superfluity of numbers, and this in turn is attributable to many conditions beyond control.

However, taken for a span of ten years, it is believed that some idea may be secured of the number of elementary teachers supplied through this medium. It was planned to have a more direct comparison by counting the number of Normal School graduates included in the total number assigned each year for each department of public school work, but time permitted your committee to have at hand a count of totals for only two consecutive years, of which the percentages are 53 and 69 respectively. It must be noted likewise that quite a number of factors co-operate to limit the number entering the service of teaching in Chicago through this channel. Some of the most important of these, coming to the attention of your committee, may be cited without comment: 1. The fact that for a few years the length of the total time of training was extended from two years to three years. 2. The raising of standards of admission. 3. The fluctuations in municipal sentiment and in consequent educational policy, relat-

ing to the desirability of the Board of Education of Chicago attempting to educate the whole or even the major portion of its teaching corps. (The number of entrants was fixed by rule of the Board of Education at 250 or such additional numbers as might be considered desirable to accommodate.) 4. The aforementioned delay in assignment during a certain year or number of years, and the influence of this discouraging news on would-be applicants. 5. The fact that entrance to Normal School is made conditional upon the successful passing of an examination. Although this examination may be sub-divided and parts of the same may be attempted early in the high school career, many delay, fail to decide, and subsequently fear the examination in toto. It might be noted further that the required physical examination for all entrants, while endeavoring to improve the quality, limited the numbers during the first five years after adoption, less than 7 per cent, and during the last five years less than 3 per cent. The location of the Normal School buildings and consequent distance from all sides of Chicago other than the south side is mentioned as a deterrent of entrance. On this point the following data are presented through the courtesy of the principals of elementary schools of district No. 2, which gives the residences of the students at present in attendance at the institution:

County Students (not considered)	58	
Residing North of 12th Street	192	39.6
Residing South of 12th Street	292	60.4
Unclassified	7	
Total	549	

In former years the four months' period of cadetship in the schools played an important part in the training of Normal School graduates. After the payment of the regulation stipend for expenses (\$20.00 per month) was abandoned, the custom has grown up of requiring more and more service as substitute teachers, until at the present time the cadet's four months' probationary period is practically spent in substitute service, i. e., teaching the classes of absent teachers.

If the cadet remains at least two days filling such a vacancy, her work is marked as to its worth by the principal of the school, and should she not be so fortunate as to fall into a position to which the regular teacher of the room does not return for a number of weeks—a situation that sometimes occurs—it is probable that she may not remain with the same group of children more than two days, or even one day, and it is within the range of possibilities that she may have a different class-

room each day of the total four months. Besides this, should her service be given in more than one school district of the city, her work will be evaluated by the District Superintendent of Schools of each such school. The average mark or ranking accorded her from this service of teaching is equated with the school marking given her by the Normal School on graduation, her practical standing to count for one-half and her Normal School rating to have equal value thereto.

The committee on survey suspected that herein lay possibilities of temporary or permanent interference with the training given by the Normal School, and it was subsequently ascertained that the Superintendent of Schools, in her annual report as principal of the Chicago Normal School 1906-1907, page 128, had called attention to the injurious effect during cadetship of this substitute service on professional training. With this end in view a questionnaire was sent to each principal of an elementary school of whom two hundred and thirty-eight made full responses, also one to two hundred and seventy-five graduates of the Normal School of not less than three years' experience or more than five years, of whom seventy-five replied.

Brief summaries of the results submitted follow:

Of the principals, twenty-five believe that it is fair to mark a substitute cadet on the basis of a minimum two days' service, and two hundred and seven believe it is not; one hundred and forty-six think that the work of substituting is too difficult a task for an inexperienced teacher to undertake, and eighty-one think it is not; one hundred and thirty-two are of the opinion that substitute service is liable to disintegrate the young teacher's training, and ninety-five think it does not. The majority affirm that there is not an undue emphasis on "discipline" in such markings (although many admit that with regard to discipline they must consider this from the viewpoint of her service in the school rather than her training); one hundred and fifty-four believe that it would be beneficial to these young teachers as well as to the school system if graduates of the Normal College were assigned to rooms of small membership and remained there at least four months, and seventy-two believed that it would not, giving their preference to the previously obtaining cadetship service. Of the graduates of the Normal College, 78.6 per cent say that more than one-half of their cadet time was given to substituting and 21.4 per cent reply that less than one-half of the time was so given; 49.3 per cent affirm that they were able to apply their Normal training in the service of substituting, 21.3 claim that they were not, and 29.3 per cent say they were able

to apply it only partially; 96 per cent believe that substituting is more difficult than regular teaching and 4 per cent that it is not; 80 per cent would prefer at first a regular room, the remainder are just as positive they would not.

Further, the following brief summaries are submitted from replies made by principals of elementary schools and by principals of high schools. The first refers to an expression of opinion concerning the efficiency of the graduates of Chicago Normal School and their preparation for teaching after two years' experience, when compared with experienced teachers who had come into the educational system of Chicago by examination; 115 principals are of the opinion that graduates of the Normal School make less efficient teachers than those brought in by examination, and 97 express the opinion that they are more efficient; 30 principals give no answer, and 16 state that there is no appreciable difference. Moreover, 15 principals of high schools make suggestions for bringing the vocation of teaching more prominently before the graduation classes of the high schools. Of these, 7 suggest that the graduates of the public high schools should be admitted to the Normal School without examination; 6 suggest talks or conferences before high school classes by the Normal School faculty; 1 believes that the Normal School should be more centrally located, while another is desirous of changing the attitude of the Normal School faculties toward the training received in the high schools.

Finally, on the question of increasing the number of admissions to the Normal School and of improving the quality of its product, the following suggestions were formally or informally collected:

1. That the Normal School should be made a more integral part of the public school system by admitting graduates of the public high schools without examination.

2. That some plan should be devised for securing a pro-rata apportionment for each public high school and for each accredited high school, thus giving the schools an opportunity to offer their best product to train for the profession of teaching.

3. The cadet period should be made financially productive to the graduates of the Normal School without requiring them to perform the work of substituting.

4. The vocation of teaching, and this means of entering it, should be kept prominently before the students of the high schools by addresses by members of the faculty of the Normal School, formal and informal meetings, such as a "high school

day" at the Normal School, acquaintance with their best teachers of the staff, and the like.

D. P. MACMILLAN, Chairman.

IRA C. BAKER,

Prin. Earle School.

DANIEL J. BEEBY,

Prin. Oglesby School.

J. CLARA BREESE,

Prin. Burke School.

MARY CARTER,

Teacher Nash School.

ANNA M. CODY,

Teacher Bass School.

MABEL S. CONDON,

Teacher Kershaw School.

NELLIE E. DUNTON,

Teacher Kohn School.

MARY S. L. HARTIGAN,

Prin. Harvard School.

HARRIET F. HAYWARD,

Prin. Dante School.

LESLIE LEWIS,

Prin. Kozminski School.

JOHN A. LONG,

Prin. Hammond School.

MARY E. MARNELL,

Prin. Dunning School.

EMMA MCCREDIE,

Teacher Komensky School.

HELEN W. McLAUGHLIN,

Prin. Drake School.

CATHARINE SEEBERGER,

Teacher LaSalle School.

MARIAN M. SHEA,

Teacher Langland School.

ELIZABETH SMYTH,

Teacher Peabody School.

BERTHA SUTTER,

Teacher Nettelhorst School.

EMMA M. TURNER,

Teacher Byford School.

HARRY S. VAILE,

Prin. Froebel School.

KINDERGARTENS.

In order to secure the best results in the kindergarten survey, it was thought best to sub-divide the general committee into groups for the purpose of observing the art, occupation, gifts, English, circle work, and equipment. Each group visited and observed in general all the work in as many kindergartens as possible in the time allowed, but reported on only that division of the work assigned to them.

Art—We realize anew the many phases of (educational) art, together with the variety of difficulties to be surmounted, and appreciate the interested efforts which are now doing so much by way of nurturing and developing the tendencies of the little ones in our schools. We enjoyed, in several instances, the evident relation of Feeling for Beauty as kept in mind by the kindergarten teacher through circle, occupation, gift, game, or environment, and wished this could be universal.

In each kindergarten visited, we felt the constant need of careful consideration and use of the art principles governing color, beautiful arrangement, rhythm, repetition, and proportion, unconscious, to be sure, on the part of the child, but presented by the teacher with a purposeful sequence, showing steps in relationship and growth, and leading to some *worthy goal*. We offer this suggestion as a possible remedy for the small and *pottering tendency* found at times among the children. In some schools there seemed a reluctance on the part of teachers to show the crude work of the children, apologizing for their lack of pictorial effect. This led us to careful reflection.

Drawing—Do we realize that the activity known in the kindergarten as Drawing differs greatly from that of Representation as expressed by the adult? The little child's work is, in reality, a form of picture writing, by means of which he registers his experience and experiments. By this individual expression, observation is awakened, seeing power strengthened; and with various aids, such as his *teacher drawing with him* and for him,—ere long he begins to use the graphic language which in time gives him the power of representation, also being the basis of the written language. With this awakened sense of seeing comes

a semi-freedom and power. This is the opportune moment for informal free drawing and plenty of blackboard work.

Color—Under color experimentation, we found classed Painting,—crayon drawing and colored paper work. The method used in handling these mediums are certainly improving, and the work more tender, sympathetic and interpretive. As teachers, we are realizing that all these various elements are added lines down the avenues of experience and experiment, and that there is but one great purpose in all the activities. In choosing mediums and materials, we advise greater care in selection as to fitness to purpose. We find constantly increasing need for more experimental work on part of children following the directed work of the teacher, more free blackboard work, more sand and clay work.

Occupation—The committee found considerable variation in the different schools as to the kinds of work, but much similarity in its purpose. In general, there was a conscious selection by the teachers of work that has a live interest for the children. Such problems as the construction on the sand table of a village street with houses and stores of pasteboard, the buying of groceries, using toy money; the construction by each child of a pasteboard tray, on which was shown a yard, including a house and outbuildings, walks, garden, play apparatus, etc.,—such work is very practical and constantly appeals to the child's initiative and judgment.

One problem that was being worked out in several schools with different kinds of material was the play house, or doll's house. This was done, both by groups of children, and individually. One very practical way was being worked out thus: Three sheets of stiff paper, or cardboard, 12 x 18, were given to each child. These were used for three sides of a room. One side was left out, and no ceiling or roof was attempted. The sides were attached to each other with fasteners. The room could then be stood upon the floor, or folded up and put away when not in use, or flattened out on the table when the child was decorating the walls. This decorating he did with crayon, putting on his own design of paper and border, and drawing in windows, doors, curtains, pictures, etc. Some children were busy weaving small rugs, making chairs, settees, etc., for the furnishing of the house. For chairs, each child was given four small pieces of wood cut to form the seat, arms and back. He then had to select the proper pieces and nail them with brads. Each child worked by himself, the teacher directing by such questions

as: "Is that like this chair back?" "Could you sit in it if it were made that way?" "Does a door go all the way down to the floor?" "Could you walk through this door?"

This is a sample of much of the kind of construction work found by the committee. Such work is ideal from any pedagogical standpoint. The artistic sense is appealed to in the decoration and proportion of parts. Exercise in comparing and deciding was continually called for, and splendid hand training accompanies the whole lesson. The teachers were quiet and observing, but not busy or worried. The lesson described above is a clear demonstration of the fact that when the proper material is put before the child in the right way, the most of the teacher's work is done. The child will do the rest.

The freedom of the kindergarten from artificial demands makes it possible to follow the lead of the child's interests almost completely. This is not so easy in the first grade, where the demand is that all do a certain amount of reading in a limited time. However, in spite of this royal opportunity in the kindergarten for pedagogical procedure, the committee found a woeful lack of purpose in too much of the work. We doubt the value of what is called "Free Play Periods", where it seems to be the custom to give each child a set of blocks, sticks, balls, or pictures, and allow him to amuse himself for thirty minutes or more. The result is that nothing is accomplished. There is no interest after the first five minutes, and listless and purposeless fooling fills up the time. So, also, we would criticise as not being good, such work as cutting out with scissors various forms as hoes, spades, rakes, especially when the child has no idea that these forms are to be put to any use. The small amount of eye and hand training could be better secured in connection with some live topic. The criticism is practically justified in the lack of interest shown by a class doing such work.

Sometimes the lesson is merely a dictation; or, again, the teacher has done too much for the children in getting material ready and partly doing the work, so that nothing is left for the child to discover, and his work is purely mechanical. Articles shown at exhibitions of childrens' work are often produced in this way. There is, however, no department of our schools which shows such evidence of intelligent direction as the kindergarten.

The Gifts—Gift work was being done in all the schools visited by the Committee on Gifts,—in some schools twice a week; in some, three times. Exercises with colored balls, exercises in building, picture-laying and design were observed. The children

were acquiring, through the work, experience in form, number, color, and rhythm; and the committee saw with pleasure that a spirit of persistence was fostered, as well as initiative and imagination.

The committee understands that, in some degree, the other activities of the kindergarten have absorbed some of the time formerly given to the gifts, partly because these give more opportunity for larger activities, and for a more conspicuous type of social activity. There are values in the gift work, however, which, if well developed, cannot be supplied with other material. If the children worked in smaller groups, a freer and more active kind of work could be done, more marked results could be looked for, and larger material could be more easily used. The teachers showed preparation, and that they realized to some degree the constructive and artistic possibilities of the work, as well as the experiment and play involved. But, the perspective of the exercises was not greatly felt, and a more purposeful growth of independent power in the children should be worked for.

English—The sub-committee, or group appointed to survey the English visited seven kindergartens, four in the better class districts and the others in the poorer class financially. The story-telling was well done by the teachers, which was shown by the attention given and by the furnishing of details by the children where the story was familiar. In each of three kindergartens the children dramatized a story, using the speaker's words in acting. In another, they dramatized one, acting as birds. The kindergartner corrected the mistakes in English made by the children, and the children were very responsive to their teachings.

In the singing and reciting of nursery rhymes, the enunciation was clear, and the children enjoyed them, especially when individuals were selected to take the parts of the characters. It was observed that in several instances, the songs were too long,—so much so that by the time the third verse was reached, there were but few of the children who were familiar with the words. The stories of nature were made graphic by the cuttings and by the drawings.

Circle Work and Its Relation to the Special Activities of the Kindergarten.

The Circle Work began with music from the "masters" to quiet and bring the children into a state of harmony. This was followed by a courteous greeting of each to all, and by songs chosen by the children directed by the kindergartner. The aim

of the songs was to bring out the melody, correct time, and harmonious tones. The songs were chosen to fit the seasons, home activities, nature study work, and to develop patriotic thought. After the songs the children gave their experience. The aim of these was to develop natural, free expression, create a sympathetic relationship, and a sharing of pleasant experiences.

The subject of the morning talk in many cases was some form of Nature-study. In some instances the illustrated work was carried out in the games and in the table-periods. It afforded excellent opportunity for the development of language and the use of English. In the incidental stories the children gained freedom of oral expression in their language and got ideas of enunciation and pronunciation.

The rhythmic work in the circle was given with a view of developing concentration, ear-training, and physical grace. Many forms of rhythmic work were seen; among these were skipping, running, marching, galloping, hopping, and flying. Some interesting phases were stick-tapping, and junior orchestras, in which the children played drums, triangles, bells, cymbals, and tambourines. Another interesting feature of the rhythmic work was the simple folk dances. An example of the cycle of plant life was also shown in the rhythmic work.

The foundation of good citizenship was laid by teaching the children to take care of the room, school yard and premises, and teaching them to respect public property generally.

Many nature and symbolic stories were dramatized as exemplified by the story of Persephone, the White Pigeon, and the Birth of the Butterfly. In some cases the children were allowed to lead the march and tell the stories. Individual singing was also encouraged, sometimes without the piano. The aesthetic sense was quickened by the planning of garden beds in which space relationship and number work were considered.

Equipment—The committee found the kindergartens, on the whole, to be well equipped. A very small amount of poor material was in evidence. This was explained by the teacher as having been furnished some time ago. At present the materials received are good in quality and in color.

The location of the kindergarten room, in several instances, was in a very noisy part of the building. The noise caused by outside influences was often so great that teachers and pupils could not be heard. The Committee would therefore recommend that in such cases the kindergarten exchange rooms with

some other department of the school,—manual training or household arts, if possible.

EDWARD F. WORST, *Chairman*.

MIRIAM DEL BANCO,

Principal, McClellan School.

MARY GREENE,

Principal, Whittier School.

LUMAN HEWES,

Principal, Manierre School.

ANTOINETTE MILLER,

Teacher, Chicago Normal College.

ALICE O'GRADY,

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MARY W. O'KEEFE,

Principal, Throop School.

HELEN H. ROBINSON,

Principal, Springfield Avenue.

EDMUND B. SMITH,

Principal, Parkside School.

ALMA M. WILLARD,

Principal, Brownell School.

MINNIE M. WRISLEY,

Principal Ryder School.

READING IN ELEMENTARY SCHOOLS.

The committee appointed to make a survey of Reading in the Chicago Schools consisted of fifteen members: seven principals of Elementary Schools and seven teachers, with the Supervisor of Household Arts as Chairman.

The committee planned to make its work quite comprehensive, so, in selecting schools to be visited type schools considering nationality and environment were selected. This seemed eminently fitting in a city which received fifty-four thousand emigrants from May 1, 1910, to May 1, 1912, and in which the Census of May 2, 1912, shows that sixty-three per cent of the minors are of foreign parentage.

Seven groups of schools were designated, each group made up of schools which presented similar problems so far as heredity was a factor, but situated in widely separated sections of the city so that different methods of dealing with similar problems might be noted. In addition to this, at least one other school offering a direct contrast in environment and inheritance was added to each group. In planning the work the committee was divided into seven sub-committees of two members each. Each sub-committee was to visit one group of schools and present written reports to the whole committee. This seemed a working basis to enable the committee to note home conditions, problems of foreign sections, conditions for and against good school work as well as different methods of dealing with similar difficulties and also to note how great, if any, differences in results existed when conditions were widely different. The plan was to visit all the grades in a school, the committee thus moving along with the child and noting the excellencies and also the difficulties. The committee hoped also to get information concerning not only the class reading which they heard but the formation of the reading habit. So inquiries were made about books owned and read by the pupils, bringing interesting statements about treasured books owned and the use of the Public Library and School and Church Libraries.

During the three weeks spent in visiting, the committee met once each week to hear and discuss the reports. So the whole committee had finally a very good view of the entire field surveyed and can testify to the value of the survey in their own experience.

Reading is the most wide reaching acquisition made by the child in school. It is in constant demand in all lines of study.

Lifelong reading is by far the most significant means of making, keeping, and extending his acquaintance with the world and of entering into his human heritage. No other study demands or deserves more careful consideration or more wisely elaborated plans.

The paramount importance of the subject of Reading in first grade and the consequent need there of specially gifted teachers, makes it fitting to deal with the subject in first grade by itself. The lowest first grade room as well as the A first was visited, the aim being to see what was done and how the result was obtained. Our visit was made at the beginning of the eighth school month, so the majority of the children we heard reading in this grade had been in school not more than seven months and many of them a much shorter time. Few, if any, were able to read at all when they entered school. Many came speaking a foreign tongue, a still larger number from homes where no English is spoken.

First Grade Teacher—It is very difficult to separate the first grade teachers from the first grade children. Any statement so often insists upon including both. Culling from the reports the majority are characterized as excellent, working enthusiastically, aiming to get the children to love to read, creating the happy atmosphere in which little children have a right to live; the only atmosphere in which they can rightly develop. In schools in forlorn neighborhoods we found forceful, magnetic teachers, optimistic, interested, enthusiastic; missionaries as well as teachers, missionaries with love and sympathy.

Reading Power of First Grade Children—Here a few distinct classifications are possible.

Class A—Emphasis was placed upon thought getting. Teachers and children really studied together. After the children had conquered the difficulties they read. Children went always from the new word to the familiar for help. They had acquired this habit of study and were thus early able to help themselves. Interest was keen; children dramatized and lived the stories with their book friends. There was a splendid spirit; a quiet, interested atmosphere of industry. Teachers had succeeded in their aim:—"to get children to love to read."

It was a great pleasure to hear these little people read, enunciating clearly and making a most successful effort to have their listeners understand and enjoy the stories that were so interesting to them.

Class B—Teacher worked in sympathy with the interests of the children (many with little English) and sought to organize and deepen their impressions by relating them to their past experi-

ences. Stories were dramatized, reproduced in free hand drawing and paper cutting. Getting thought from the printed page and expressing it were well done. Through their knowledge of phonics children had the ability to readily master new words in sight reading. Children read so listeners easily got the thought and enjoyed it. Amount of reading done was comparatively meager. Enunciation, interpretation, articulation were excellent. That which pleased most was the joy they seemed to get in their reading.

Class C—Work began with interesting jingles and stories from which a small reading vocabulary was acquired. Then followed word building through phonics most enthusiastically taught and endorsed by the teacher. Children have already read many First Readers.

Class D—Children knew little English. Development of thought through interest in the subject matter was subordinated largely to identification of sound, syllable, and word. After much labor and trouble the children expressed orally the printed page with certainly but meager comprehension of the meaning. With such children object teaching should be used. The image of the thing should be theirs and then the name word.

In contrast to this group the committee saw rooms with ten or more nationalities where great interest and enthusiasm were manifested. Charts had been made by the teacher to suit the needs of her special pupils. There was good enunciation—thought the real interest—but mechanics were carefully attended to.

Class E—Happily a small class. Children read again and again the same sentence, the same weary story. Children had no power to help themselves.

Other Primary Grades—There was much excellent work continuing the good work done in first grade. It is food for thought that often the excellent and most ordinary teaching is done in adjoining rooms in the same schools, these sometimes being rooms of the same grade.

Class A—The careful handling of the matter of emphasis and inflection in the second, third and fourth grade rooms in this group deserves note. The mechanical inflection which poorly taught children of these grades exhibit, is well nigh absent here. Common problems of the subject:—pronunciation, enunciation, are carefully and intelligently handled. Though subordinated to the mastery of thought, the formation of the art has received careful attention, making for refinement and control. All work is presented with intent to make vivid to the children the content and then have them express it. The teacher asked important questions. The answers were found just before them. They read

silently, then orally. Work was well done. The teacher gave a few minutes valuable work with alliterative lines. Some of the difficulties they yet had to conquer were on the board for special drill. Two important points in progress: (a) to recognize a weakness; (b) to proceed persistently to change it to strength.

Class B—Oral reading was marred by poor position and indistinct tones, but the children were interested in the stories and showed they enjoyed them. These children, with a little higher standard in the teacher's mind, might easily have been added to Class A.

Grammar Grades—The committee reports finding much most excellent work in Reading in these grades.

Little inane material is used and none need be. The range of choice in these grades is wide. The subject matter dealt with is attractive. It is wholesome and much of it difficult, but not beyond the pupils' grasp.

Class A—The good training in distinct enunciation begun in the lower grades has been continued so that here the habit seems established and clear, distinct enunciation in reading is without conscious effort. There is nothing artificial in this oral reading. It is a natural, intelligent interpretation of the text so given that the listeners enjoy it. They read with a joy and spirit which indicates that reading gives them pleasure as well as information. No affected mannerisms here; they have been banished to keep company with the hesitating, incoherent style sometimes observed. Difficult passages were intelligently commented upon. Discussion was varied and deductions were not superficial. They read poetry and prose with equal power. These satisfactory results are very generally attained in many districts and the standards there set are spreading. The teacher enters into the work with broad sympathy and the development shows her success. The children get the thought from the printed page and with it a knowledge of and delight in some of the beautiful things in literature.

Class B—Some seventh and eighth grade classes were reading too rapidly, with indistinct enunciation and little expression. This makes of oral reading a failure, its only purpose where there is an audience being to reach that audience. Failing to read clearly with correct pronunciation, and showing he has grasped the author's meaning, the reader fails to reach his listeners. These children were permitted to express themselves hurriedly and their tone and enunciation as a result did not bear out the prophecy one would be forced to make in visiting the first five grades in the same schools.

The introduction of other heavy subjects in the upper grades

no doubt causes a shifting of the teacher's interest, so sometimes the emphasis that is put on expression, tone, enunciation and pronunciation in lower grades is allowed to lapse. This shows not only in the reading but in other recitations and is a defect.

To lead children to think is fundamentally important but the expression of thought in effective oral speech is also of great value. Many teachers succeed in doing both in the Reading and in so doing accomplish a great work for their pupils.

Class C—Two reports of visits to schools receiving many non-English speaking pupils are important.

(a) Reproduction showed most unexpected comprehension of the beautiful poem being studied. The reading was a simple straightforward effort to secure for these children a working knowledge of the English language. This endeavor was attended with remarkable success. The committee never heard more intelligent reading in any school and never saw greater interest or more unforced attention.

(b) Stolidity manifest; material uninteresting. Teachers' elucidation of the lesson consisted in having children look up in the vocabulary in the back of the book the words they did not understand and leaving them to make the application.

Class D—This class is made up of an occasional room here and there.

(a) Some reading too loud with note of strain in the voice.

(b) Joy of reading spoiled by too much analysis and too much repetition by the teacher.

(c) Precious time being wasted reading aloud reams of material containing little information. This also where each child was provided with a book and was faithfully gazing at it. The sets of books so used contained material quite within the study range of the grade. A wiser treatment of such "information" readers prevails in most schools:—rapid silent reading, questions that point the essential, possibly a few pertinent sentences read aloud.

Silent Reading—Since through newspapers and books we are eternally busy with silent reading the committee was pleased to note the attention it received. From first grade up we found an effort made to have at hand books to be read silently by individual pupils as occasion offered. Even some first grade rooms have a cosy reading corner. When necessary work is finished the children may use these books until next class exercise begins. We observed during our survey in a class of about thirty-five pupils each child reading from a different book. By exchanging

these books during the course of the year each member of the class reads them all. The interest was unusual.

Supervised silent reading where information alone is sought is the best means for securing the thought from the text and for developing the ability to study. Histories, Geographical Readers and other information books are best used in this way. The committee found many rooms in which this treatment prevailed.

Methods—"Some fortunate children have learned to read without any method." The plan of using phonics first which the committee sometimes found, is not commended. It is too nearly related to the discarded alphabet method. Knowledge of phonics should grow out of observation and comparison of similarities in the words already learned, enabling the child to apply what he has learned when he meets new words. This requires drill. The work done in first grade must be systematically added to in second and third. There is happily little beginning with the so-called mechanics of reading so that at some future time the children may have some pleasure in reading.

From first to eighth grade the method that brought results worth while began with interest in the subject matter, and conquered pronunciation, enunciation, and expression in order to interpret the thought to the student and to the listener. To make the listener hear, understand, and enjoy was made the object of the best oral reading and the reader's success was measured by his ability to do this.

Dramatization—Among the many methods used to make real the literature studied, dramatization deserves special mention. There is no school that does not make some use of it; many schools use it in a number of grades, and a few use it intensively in all grades. Several sub-committees report most favorably on the work observed. They believe it enables the child to understand better and to appreciate real literature and increases his power to share with others, by means of fitting oral expression, the pleasure and profit thus derived. In presenting the exact words of another he feels and enters into the personality of that one and forgets himself. Self-consciousness is the bane of school life and this helps free him from it.

In the lower grades the children are encouraged to speak and act just as they suppose the characters of whom they read must have done. Each child is allowed to give his own interpretation, but the teacher, by pertinent questions, assists him to get the correct understanding.

Dramatization in every grade begins with the reading of the play as a regular reading lesson. Certain scenes are committed to memory and recited in concert. This is admirably done:—the

intonation, voice-quality, enunciation, pronunciation, and expression receiving due attention. Different members of the class are then called upon to impersonate the different characters, great freedom of interpretation being allowed. If the play is to be staged, the children usually select the cast, and soon display good judgment and discrimination in making their choice.

The committee found exceptionally fine work in a Fifth Grade Class that was handling an entirely new lesson in the Howe Fifth Reader and following this by rendering a scene from Julius Caesar. One would really have to see it to believe children capable of the truly dramatic touches, the artistic finish this work makes possible.

Other direct results of this work:

(a) Ability to read and comprehend the text books in other subjects.

(b) Interpretation furnishes opportunities for originality and initiative in written English.

(c) Cultivates the use of clear, clean-cut enunciation.

(d) Furnishes opportunities for lessons in ethics and morals that make for character building.

Memorized Literature—These boys and girls we have been visiting range in age from six years to thirteen, fourteen and fifteen. We need to remember what children they are and yet how much of all their future depends upon what they learn to do and to love in these years.

The committee was delighted to see the general use, in connection with the work in Reading, made of the Memorized Literature which for some years has been a valued requirement in our Course of Study. Much of this work is done in concert and is inspiring. Its value is second only to that of our Assembly Singing. The teachers lead their pupils to understand and interpret the author with dramatic effect whether the selection is thrilling, sad, or amusing. Many schools have incorporated in this a wise use of old standard Reading Book classics. A few years ago these seemed threatened with oblivion. A critical and repressive taste held them too trite and bombastic. But now they seem to be enjoying a well deserved renaissance and we recognize their great educational value. There can be no doubt of the effect on the youthful mind of such soul stirring selections as "The Charge of the Light Brigade," the thrilling story of "Spartacus," and the patriotism inspired by the "Speech of Patrick Henry."

Reading Material for Class Work—Suitable material is of vital importance if we are to teach our children to read in the truest sense, to love to read, to come into the companionship of the best minds the world has known. Reading material of this character,

available in the Chicago schools today, is abundant. The excellent work done in Reading, including in this not just oral expressson but all that the pupil gains from this subject, is due in part to the material available and the way it is supplied. The "Howe Readers" are raising the standard of reading in the grades. Once, sets of books were sent to the schools because some one thought or had been told they were suitable for some children somewhere in a certain grade and so must of necessity be best for all the children in that grade everywhere. Now, the amount of money yearly allotted per pupil for each school for Supplementary Readers is spent for books selected by the people who know the needs of the individual schools:—the principal and interested teachers.

Their selection is made from lists approved by the Board of Education, a list that may be increased from time to time as other suitable books are recommended. The breadth of this choice is shown in the summary of our Supplementary Reading list here given:

Grade.						No. Books.
I.						137
II.						128
III.						140
Subject.	Gr. IV.	Gr. V.	Gr. VI.	Gr. VII.	Gr. VIII.	
Art	6	4	5	3	5	
Geography	13	39	42	32	..	
History and Civics..	20	53	35	63	58	
Literature	101	95	96	52	69	
Nature Study	24	12	12	9	10	
German . . . . .	..	..	3	3	5	

The Reading Habit—It is not just important that a child read a book. He should read a right book. The reading habit is not in itself of great value. It may readily degenerate into a form of dissipation to be deplored. The school is working earnestly to lead the children to form the habit of reading good books. Each new school opened is allowed one hundred dollars by the Board of Education for a school library. These one hundred-fifty or two hundred books are a fine beginning and ways are often found of adding to the number. The accredited list from which the books must be selected numbers about seven hundred. Some rooms even in first grade are proud owners of an individual school library. In other rooms they are learning to find the right material in the Daily Papers by making Supplementary Readers for themselves. They are gathering all the articles they can find on certain topics, for example:—Civics and Nursery Rhymes. Many teachers go to the Public Library and personally conduct the selection of the fifty books for their pupils in order to be sure the books are so

suitable and attractive that the children must read them. The attitude of the Public Library is a great help. Boxes containing fifty books may be selected by teacher or librarian and sent to the school. The Young People's List contains books on hundreds of subjects, both instructive and recreative. In the schools today there are over twenty-five thousand volumes from the Public Library. The Board of Education provides for the transportation and the teachers or principals are responsible for their care. The department has had few losses since it was in operation. The books may be retained five months and then renewed if desired. When needed to teach a special subject a list on that subject may be sent the librarian. These books may be kept for six or eight weeks. If the particular books needed are not in "The Young People's Finding List" they are drawn from the general circulating department and sent to the schools.

Many of the small parks have library centers which serve children and their parents. Each one has a librarian whose business as well as pleasure it is to help the boys and girls in getting material for daily work. Oftentimes the teacher urges them to go to a center for the required information and frequently goes with them. If the books are not readily obtained the children are assisted by the librarian, and soon become independent in getting what is needed. Many go daily to read for themselves. They enjoy the storyteller sometimes found there, and when the stories are heard they are often anxious to read them. This greatly improves the amount and value of home reading. Here must be mentioned the school rooms maintained in the loop district by the Board of Education for adults who wish to learn to read. Many men and a few women who have a little leisure in the day time and who are anxious to learn to read and speak English avail themselves of this opportunity. They come and go just as their work permits. Some attend half a day, many but an hour a day, while others are there all day for a few weeks at a time. It is a splendid opportunity to offer and we saw about one hundred earnest people availing themselves of the privilege. One of the very attractive reasons for their presence there is that they may be able to pass the test and receive their naturalization papers.

Summary—The sub-divisions with which the committee started out would not remain group divisions now in the light of the knowledge acquired in the survey. At first these divisions were separated by parallel lines, so many schools in a group. If these schools were now placed on a map and reading lines arranged similar to the lines on the weather bureau maps, the resulting map would look as this same weather map looks on some freak temperature day. One of these lines passes through rooms con-

taining books from the Public Library which the children are reading eagerly. These books are all the kind they like as well as the kind they ought to read, because Teacher has spent the necessary hours at the library to make sure she had the right books. This line would sometimes have to leave out a neighbor teacher who is sure these pupils would not understand or try to read library books. Another line exhibits most wonderful contortions and finally shows strange omissions. The line of highest approval would pass through the best our most favored districts can show and circle to include some rooms in a far-away school of which the committee said: "We began with little foreigners into whose lives little sunshine seemed to have entered, with no glimpse of American ideals and finished with a homogeneous body of alert, interesting, normal American children, reading fluently, with enjoyment and appreciation, so their reading was a pleasure to the listeners."

IDA M. COOK, Chairman.

WALTER H. COMSTOCK,
Prin. Shakespeare School.

ADRIAN M. DOOLIN,
Prin. Webster School.

ETTA Q. GEE,
Prin. Franklin School.

MARY E. C. LYONS,
Prin. Henry School.

DANIEL F. O'HEARN,
Prin. Corkery School.

KATE A. REEDY,
Prin. Columbus School.

ELIZABETH H. SUTHERLAND,
Prin. Barnard School.

BESSIE J. HANNA,
Teacher Household Arts.

MABEL E. HIGGS,
Teacher Household Arts.

WINIFRIDE JOYCE,
Teacher Household Arts.

STELLA M. LAUNER,
Teacher Household Arts.

ANNA L. LODGE,
Teacher Household Arts.

THERESA ROPP,
Teacher Household Arts.

FLORENCE G. RUTHERFORD,
Teacher Household Arts.

SPELLING.

The Committee had hoped to visit about one hundred schools, but was obliged to limit its investigations to forty-six different schools.

The plan agreed upon was as follows:

1st—To prepare a Questionnaire to be filled out by the principal or teachers of each school showing the method of teaching and of studying spelling.

2nd—A list of detached words to be pronounced to classes of pupils in the fifth, sixth, seventh and eighth grades.

3rd—A selected dictation lesson to be read to the pupils and the words marked for spelling.

4th—An original composition of ten or twelve lines to be written by the pupils upon any subject they might choose, the words misspelled to be counted.

We submit herewith these various tests as prepared and made in all these forty-six schools, with the tabulation of results and some comments upon the same:

QUESTIONNAIRE.

A.

SPELLING PERIOD OR RECITATION.

1. Do you have a regular spelling period upon the room program?
2. In what grades do you not have such program for spelling?
3. In what grades is the spelling written?
4. In what grades is the spelling oral?
5. If both oral and written, what portion of the drill is oral?
6. Is syllabication used in oral spelling?
7. Is word analysis part of the oral work (phonics and word building)?
8. Selection of words:
 - a. Book in the hands of the children?
 - b. Lists of words selected from other lessons?
 - c. If (b) what subjects?
 - d. If (b) are lists passed on from grade to grade?

B.

STUDY PERIOD.

- 1. In studying the lesson are the words written by the children?
- 2. If written, (a) is each word written a number of times?
(b) is the whole list written and then re-written?
- 3. Are the children asked to select from the lessons the words they think most difficult and give special attention to them?
- 4. Are they asked to concentrate on the difficult part of the word?
- 5. Do the children study the syllabication of words?
- 6. Is there any study of the rules of spelling?
- 7. Is any use made of the dictionary in the study of spelling?
- 8. Are the children asked to give the meaning of the words
(a) By definition?
(b) By writing them in sentences?
- 9. Is the spelling lesson ordinarily assigned for home work?

The results from this Questionnaire for the forty-six schools are tabulated as follows:

A.

Question.	Yes.	No.	Indefinite.
1	44	1	1
2 (1st Grade)	7	..	..
(1-2)	7	0	32
3 (2-8)	19	..	..
(3-8)	22	..	..
(4-8)	5	..	..
4 (all)	30	..	..
(1-2)	11	..	..
(1-5)	3	..	2
5 (1/2)	16	..	..
(1/3)	10	..	..
(1/4)	3	..	..
(1/5)	5	..	12
6	43	2	1
7	41	2	3
8a	10	23	13
8b	37	1	8
8c (all)	35	3	8
8d	14	24	8

B.*

Question.	Yes.	No.	Indefinite.
1	29	10	7
2a	11	25	10
2b	18	20	8
3	21	5	10
4	38	5	3
5	43	2	1
6	34	5	7
7	42	2	2
8a	34	2	10
8b	37	6	3
9	17	24	5

*The large number in the Indefinite column may be partly explained by the fact that some schools apply the questions to certain few grades, and not to all and the answers could not be easily carried out in detail.

The above tabulation may suggest a number of things. Your committee calls attention to only a few, viz.:

The answers to questions A, 1, 2 and 3 show conclusively that the schools almost without exception give daily drill in spelling. This is not in accord with many statements that have been made in interviews and press reports. Nevertheless, we are satisfied that the answers from the schools represent the real facts.

The answers to questions A, 4 and 5 show that an unexpectedly large proportion of the time is given to oral spelling. This again is contrary to the preconceived notions of many critics.

The answer to question A, 6, shows that general attention is given to the recognition of syllables in the spelling of words. This may be compared with B, 5.

The answer to question A, 8, must be read with the fact in mind that for the past year no spelling book has been authorized for use in the schools. We leave to those interested the deduction of further inferences from these tables.

Part of the plan was the spelling, in writing, of a list of selected words. These words were generally pronounced by the room teacher with whose voice and pronunciation the children are accustomed. The word lists were prepared and approved by the whole committee and were selected with a view to obtaining a fairly representative list that should come within the pupil's school vocabulary.

A request was sent to some twenty-five business firms asking for a list of twenty-five words each, which it was thought the

pupils of the seventh and eighth grades should be able to spell. The business houses represented almost as many kinds of business as there were requests. To these requests five firms very kindly sent replies. An analysis of these replies is interesting and helps to explain why pupils are found defective in spelling when they seek employment in the various establishments. Each business seems to have its own vocabulary very much as each science, or art, or profession has its peculiar vocabulary. No child should be expected to be master of so many vocabularies. These contributions contain a total of 118 different words out of a possible 125. Suppose we had obtained one hundred such lists; at the same ratio we should have 2,360 different words out of a possible 2,500, a very small proportion of which are within the pupil's ordinary conversational vocabulary. It is the opinion of your committee that this experience should discount very considerably the complaints said to emanate from the business houses concerning the inability of pupils, fresh from the schools, to spell in terms of their employer's business. A similar experiment was recently made in the city of Philadelphia, and the results were equally suggestive.

The lists received were incorporated, in part, in the test list made up for the grades. The following are the words given to the various grades with statements as to the number of pupils tested. (Whole classes were tested, and in no case were selected pupils examined or excused.) The averages made are expressed in per cents.

SPELLING LISTS.

Fifth and Sixth Grades.

Arithmetic	Export	Population	Thought
Answered	Expression	People	Thursday
Adventures	Example	Question	Valley
Bitterness	Erase	Relative	Village
Banana	Fraction	Sentence	Vegetable
Butcher	Geography	Square	Wednesday
Chimney	Honest	Surface	Washington
Climate	Illinois	Month	Wigwam
Country	Invitation	Measure	Yesterday
Doctor	Kitchen	Piano	Young
District	Language	Product	Pickle
Dollar	Million	Proof	
Distance	Minute	Truant	

Seventh Grade.

Accident	Envelope	Messenger	Signing
Annually	Exactly	Neighbor	Similar
Attention	Exercise	Occupy	Sincerely
Audience	Extremely	Pacific	Telephone
Breakfast	Foreigner	Permission	Territory
Business	Furniture	Petition	Truly
Character	Governor	Plumber	Umbrella
Citizen	Grammar	Prairies	Vegetable
Courteous	Happiness	President	Visible
Debtor	Knowledge	Receipt	Weather
Delicate	Lettuce	Respectfully	Wednesday
Dictionary	Library	Rheumatism	
Disease	Magazine	Separate	

Eighth Grade.

Acquaintance	Decision	Graduation	Recognize
Alleys	Definite	Illustrate	Resemblance
Appreciate	Diphtheria	Necessary	Secretary
Benefited	Disappoint	Obedience	Sensible
Calendar	Dismissal	Occasion	Signature
Certificate	Endeavor	Official	Stenographer
Changeable	Engineer	Operation	Sufficient
Committee	Especially	Patriotism	Suspicious
Companion	Excellent	Photograph	Thermometer
Competent	Explosion	Physician	Analysis
Convenient	February	Principal	Apprentice
Courtesy	Fourteen	Privilege	
Curable	Garage	Receiving	

It is impossible to deal with tests of this character without confronting the inherent weakness and illusiveness of the doctrine of averages. It does not do justice and never can do justice in dealing with human beings. If the requirement for police service were a minimum height of five feet, the inspector would not receive one man measuring six feet and another measuring four feet, saying that their average is five feet. If one boy had just come from the table as full as he could be and another boy had been without food for twenty-four hours, we would not say that the average hunger is only half, and therefore, both could wait for another half day; and yet, this is the way we average results and estimate individuals in educational tests. Perhaps it is the best measure we have, but it is certainly very unsatisfactory. In these

present tests some schools averaged as high as 90 per cent, others as low as 55 per cent. In the summing up of results the better school is brought down and the poorer school brought up to make an average. In some groups tested a very large number of the children averaged between 90 and 100. A smaller section averaged between 10 and 40, with the result of bringing the whole group down to a low average. One child with a grade of 30 can lower the grade of five children from 90 to 80; but these things are inevitable in making up averages. Like the much-used per cents, it is a dangerous tool, and should be so labeled whenever it is turned loose upon the public.

The fifth grade list of words was given to 1,881 fifth grade pupils; their average was 74.3. It was also given to 1,948 sixth grade pupils and their average was 82.7.

The seventh grade list was given to 1,803; the average was 75.5.

The eighth grade list was given to 1,783 and their average was 76.3.

The following facts are drawn from the data at hand, and were time and space allowed many more of analogous character could be easily collected. In a group of 204 fifth grade pupils, the following words were misspelled by the number of children noted: Arithmetic, 34; answered, 70; erase, 95; relative, 112; Illinois, 95; vegetable, 112; truant, 128; automobile, 147.

In a smaller group of 90 pupils the following were misspelled:

Arithmetic, 37; answered, 43; erase, 51; relative, 58; Illinois, 66; vegetable, 59; truant, 62.

In a group of 78 eighth grade pupils the following words were misspelled as indicated:

Alleys, 45; competent, 40; definite, 37; garage, 26; engineer, 8; privilege, 44; changeable, 11; curable, 26.

In another group of 196 eighth grade pupils, we had the following results:

Alleys, 53; competent, 85; definite, 73; garage, 15; engineer, 25; privilege, 65; changeable, 35; curable, 95.

The per cents can be easily computed and the suggestions are probably self-evident.

Dictation Exercises.

The following exercises were prepared for dictation. The exercises were read slowly to the children and they wrote down the sentences. The words in *italic* were marked for spelling:

Fifth and Sixth Grade Dictation.

The fire engine is interesting to boys and girls. The clang of the gong on the engine is heard and everyone knows the engine is coming. The chief of the fire department dashes by in his buggy or automobile. Wagons and people get out of the way. A fire is burning in the engine, sparks are flying, and the smoke is beginning to pour forth. What a splendid picture it makes. Long ago men dragged the engines to a fire and pumped them by hand. Now horses do the pulling and steam does the pumping, and already automobiles are being used. Soon there will be no more fire horses.

Seventh and Eight Grade Dictation.

According to our Constitution representatives and senators are now elected by the direct vote of the people.

Many Mexican soldiers are being cared for across the Rio Grande River in Texas.

Remember to tell Frances to put a whole cupful of chopped cocoanut into her chocolate and molasses candies. Although this may not be necessary, many people appreciate the flavor.

Every large passenger steamer is provided with wireless telegraphy to summon help if it is necessary. Down under the vessel is a telephone arranged to catch the sound of the submarine bells put on reefs and shoals to warn ships off from such dangerous places. The luxury of these great boats is as wonderful as their size and safety.

In the fifth grade 1,881 pupils wrote the dictation exercise with an average of 77.4 per cent, many of them reaching over 90 per cent and some whole classes going as high as 86 per cent. In the sixth grade 1,948 pupils wrote the dictation with an average of 82.7 per cent, some schools reaching over 90 per cent. In the seventh grade 1,803 pupils wrote, making an average of 79.8, some schools in this group also reaching 90 per cent. In the eighth grade 1,782 pupils wrote making an average of 88.4 per cent, quite a number of schools going above 90 per cent, and in one or two cases reaching 94 per cent. It is apparent on an examination of the papers that there are certain words which need more than casual attention, and in many cases these are words which are found frequently in the ordinary texts which the children study. It suggests a comparison with question 8 of the Questionnaire. For instance, in one group of 196 eighth grade pupils, the word Constitution was misspelled twenty-two times; representative was misspelled sixty-seven times; submarine was

misspelled thirty-nine times; necessary was misspelled thirty-five times; cupful was misspelled one hundred and twenty-nine times; chocolate, seventy-three times; Mexican was misspelled twenty-seven times; senators was misspelled thirty-four times; luxury was misspelled sixty-five times.

The original composition test was given by permitting each individual child to select his own subject; in a few cases the children in the room selected the subject upon which they all wrote. The directions were to write from ten to twelve lines upon this subject and the papers were criticised only for spelling. In order to avoid valuing such words as the, on, it, only the number of words misspelled by each child was noted. The results were as follows:

In the fifth grade the children missed an average of 3.4 words each; reduced to a percentage basis it would mean a grade of about 91½ per cent. In the sixth grade they missed an average of about 2.4 words each, which would mean an average grade of 94 per cent. In the seventh grade they missed an average of 1.5 words each, which would mean an average grade of about 95.3 per cent. In the eighth grade they missed an average of 1.15 words each which would mean an average grade of about 97.2 per cent.

A general comparison of the results of these different tests shows very plainly that as the pupil approaches his normal everyday vocabulary, he improves in spelling; the farther removed this vocabulary is from his conversational type, the poorer he spells. The lowest grade being obtained from the detached lists with an improvement in the dictated composition and a decided improvement again when he selected his own vocabulary. This merely illustrates what one might forecast. The child is not a scholar, he deals familiarly with the objects and vocabulary of his daily experience and surroundings. If he is at all quick and alert, he easily learns to spell these words when he finds them in the printed texts. The exercise of association comes to his assistance in this but, when he comes to words that are beyond his vocabulary and are found only in books, many of which he does not understand, and having no objective essence with which to associate them, he must exercise the habits and functions of a scholar to fix their spelling. It is undeniable that we have a vocabulary for our spoken language and a distinctly different vocabulary for our written and oratorical speech. In a language spelled with such absurd and contradictory forms as we find in our English nothing but constant drill and close attention to a reasonably limited num-

ber of words can guarantee correct spelling of one's useable vocabulary. In the school days of the generation now passing away, it was claimed that six hundred words was a reasonably full vocabulary for the ordinary man; that two thousand words was ample for one in what was usually designated as the middle classes of society. We have passed beyond that stage. The unlettered gamin on the street has more than a thousand words in his vocabulary and he who reads the newspapers and magazines industriously will find 100,000 words. The dictionary lying upon our desk claims to list more than 300,000 different words and phrases. The mastery of such a list is a herculean task, and none but the accomplished linguist could compass it, and even he must be often perplexed. We have come to a period in the development of knowledge and culture when there is a positive practical demand for some reform in the senseless spellings of our English language. We are told that no school child in any European country spells as poorly as our American school child. The only reply is that no European language has the senseless and barbarous combination of letters and sounds that is found in the English tongue. Think of a German child, or a French child, or a Spanish child, finding words in his language spelled and pronounced on the plan of our words "cough," "though," and "plough," and this is a mild illustration of thousands of such perplexities forcing each English word to be remembered and recognized as we remember and recognize individual people whom we meet upon the streets. It is an impossible proposition, and your Committee feels that the record made in the schools is vastly better than any reasonable investigator, familiar with all the conditions, should hope to find.

Your Committee concludes this report by recognizing the courtesy and helpfulness of the principal and teachers of every school which they entered and the cheerful readiness of all the children to submit themselves to the tests required. While many suggestions and recommendations might be drawn from the facts noted, your Committee contents itself with the following suggestions:

First—That a spelling book, or fixed list of words, should be provided and adopted for general use in the schools without excluding the privilege of using text book lists for special study.

Second—That more attention should be given in the school system to the method of study in preparing lessons. Your Committee is persuaded that if the same attention were given to the study of words that is given to the study of problems, spelling results would be much better.

authorize as optional the use of as large a list as might be approved from the "Simplified Spelling Board's" recommendations.

W. H. CAMPBELL, Chairman.

HELEN BLANCHARD,

Prin. Chicago Lawn School.

DEBORAH FORD,

Teacher Jahn School.

LINCOLN P. GOODHUE,

Prin. Holden School.

PATRICK HALEY,

Prin. Everett School.

JEAN K. HANNA,

Head Asst. Dore School.

WINNIFRED E. JONES,

Head Asst. Goodrich School.

CHARLES A. KENT,

Prin. Field School.

CHARLES KRAUSKOPF,

Prin. Lawson School.

FRANK A. LARCK,

Prin. Stowe School.

CLARINDA MARTIN,

Head Asst. Healy School.

ELLA W. MCCAULEY,

Teacher Lincoln School.

EDWARD McLOUGHLIN,

Prin. Dewey School.

CLEMENTINA PARANTEAU,

Teacher Anderson School.

JOSEPHINE L. PORTER,

Teacher Crerar School.

MONA A. SOELKE,

Teacher Washington School.

EMMA STETZLER,

Teacher Gary School.

MARY E. TWOHIG,

Head Asst. Tilden School.

JESSIE WILSON,

Teacher Morse School.

PENMANSHIP.

1. *Purpose and Organization—*

The purpose of the penmanship committee was to visit schools, collect data and form an estimate of the work throughout the system. To the end that the committee might be representative, twenty members were selected from the principals and teachers of the high and elementary schools. Sub-committees were appointed so that particular problems might be studied and a large number of schools visited. The penmanship in eighty elementary and in twenty high schools was inspected and the collected information recorded on certain forms described in this report. The survey continued for five weeks. Every week the entire committee met and members submitted oral and written reports on the schools visited. Surveys made in other cities were studied and an expert in child-study was consulted as to the physiological and psychological aspects of the subject.

On account of the limited time at the disposal of this committee, it was decided to work on the following general plan:

To survey the work in the fourth, sixth, and eighth grades of the elementary, and the second and fourth years of the high schools.

To ascertain whether formal practice results in improved writing in informal work in the elementary schools.

To ascertain whether formal practice in the commercial departments of the high schools results in improved writing in the informal work.

To ascertain whether the formal writing in the commercial departments of the composite high schools differs from the informal writing in the other departments of these high schools.

To ascertain from commercial concerns the status of penmanship in the business world.

2. *Good Points:*

The survey in the elementary schools has disclosed that while ideal conditions are rare, marked progress in system and efficiency is almost universal. There is a refreshing frankness in the general acceptance of the utilitarian values of proficient handwriting. We have better penmanship in this year of Grace, 1914, than we have ever had before. While attainment varies with the school, there is an undoubted growth within each school

from grade to grade. There has been a steady improvement with every class entering the high schools. This renaissance of interest in pen-craft is manifest in the general enthusiasm of the teaching corps for rapid, legible writing produced under healthful physical conditions. The adoption of the muscular system provides a definite natural standard. There are few teachers in the elementary schools who have not familiarized themselves with the requirements of this system. The pupils have caught the interest of their leaders and have risen bravely to the demands of the situation. The physiological advantages of the revival of interest in writing are manifest in better position with accompanying ease, less eye and nerve strain, and increased speed and endurance. The psychological advantages are recorded in the elimination of physical strain with the consequent release of nervous and mental energy. The sociological advantages are such as result from the possession of a medium as serviceable as speech, uniformly legible, and of worth in the social, business, and professional worlds.

The secondary schools share the awakened convictions of the elementary schools as to the need of system and efficiency in the teaching of writing and as to the value of this art as a tool in every-day life. But the high schools have not allowed this awakening to influence their practice to the same extent that the elementary schools have. The success attending the formal teaching of writing in the commercial courses; the demands of educators and of the business world for proficiency in penmanship; and the increasing tendency to consider the vocational needs of the children augur well for the future of this subject in Chicago.

3. *Defects:*

Elementary Schools: Four years of the muscular movement have not eradicated all the bad habits inherited from the vertical and other discarded systems. The teachers in their desire to attain *speed* in writing, have sacrificed *form*. The formal drills produce some effect upon the formal penmanship but not sufficient upon the informal note-taking and other handwriting. Though we have adopted a definite method of teaching penmanship, there is not sufficient uniformity within the system and within schools. The variation within schools is marked where the principal shows little interest in penmanship or where the teachers, through lack of training, fail to emphasize this subject. In the primary grades there is too much pen writing and not enough use of the black-board for the teaching of form and large movements. Were all

these defects corrected, we should fail of the best results without ink, paper, pens, holders, and desks such as an expert would select.

High Schools: Little attention is given to penmanship except in the *commercial courses*, where in some cases excellent results are obtained. There is little effort on the part of the pupils to apply the muscular movement in the informal work except in the commercial courses, nor do the teachers seem to require it. Careless work upon the blackboard added to general lack of attention to anything but content inevitably undoes much of the work accomplished in the elementary schools.

4. *Hygiene of the Subject:*

Former committees on penmanship have emphasized the physical basis of the writing problem and have referred to the injury to breathing, to digestion, to the skeleton, and to the eyesight from unnatural positions. Not all the hygienic evils of school life are due to penmanship, though this branch of study has been made the scapegoat in the past. Various defects inherent in the child are aggravated by unhygienic postures. In cases of defective vision, the forehead becomes warm or hot, according to the degrees of strain; the muscle tissue soft and flaccid. The moist, inert hands imply cold, damp feet. These conditions pave the way for a train of physical ills. The circulation of the blood is impaired so that it cannot carry nourishment to maintain the proper vitality. Eye-strains irritate the nerves and affect the circulation of the blood by disturbing the vaso-motor system which controls the arteries. This causes rapid heart action, increases blood pressure, and leads to serious nervous ills in later life.

These facts emphasize the evils of eye strain caused by writing and other prolonged and close applications which require frequent focusing of the eye. The majority of children are normal and can undergo the stress of school life without injury. But the large percentage with defective vision and active brains are soon fatigued, and the resulting lassitude is often interpreted as slowness or stupidity.

5. *Suggested Improvements:*

(a) The physical conditions under which much of the writing is done must be materially changed before the best results can be secured. The desks in many of the schools are not adjusted to the size of the children and are not of suitable form. The ink should be diluted with water frequently and the wells kept in good conditions. Thickened ink and unsatisfactory pens,

holders, and paper develop a tendency to write in pencil, particularly in the high schools.

In grades one to three most of the work should be done on the blackboard with ruled lines to give the pupils the proper slant. The boards should not reflect the light; the crayon should be dustless. Pupils should be taught to move along at the board as they write instead of trying to do all work from one position. In grades four to eight the use of the pencil should be discouraged.

(b) There is a tendency to insist on speed at the expense of position, legibility, and endurance in the formal and informal work of all grades, particularly in the fourth grade in the elementary schools, and in the first two years in the high schools. Reducing the amount of work required would improve the quality.

(c) It is the judgment of the committee that daily drills are necessary in all grades below the high school. A short daily drill of about fifteen minutes seems to produce better results than a longer period once or twice a week. In grades one, two and three, work should be given on the blackboard as indicated. The pen should be introduced in the fourth grade with particular attention to position and seating.

(d) If the pupils have had daily drills up to the time they enter the high school, they will take correct positions automatically. As the body-structure is changing rapidly during the high school period, formal drills should continue throughout the four years. The amount of drill should vary with the studies taken. Pupils in the business courses should have at least fifteen minutes a day, and those in the general and technical courses not less than one period a week, this period to be taken from the time for English and spelling. There should be closer correlation between the work of the elementary and high schools and every high school pupil should be required to use a text book in penmanship.

(e) Closer attention to form should be given in the informal writing in English, History and Geography. Many pupils write well in the drills but fail in the informal work. This is particularly true of the high school. It is claimed that pupils are so absorbed in the content of their informal work and so crowded for time that they cannot give attention to form. This can be helped by insisting on good form and by avoiding long written tests. Credit for penmanship should be given on every written paper. The blackboard writing in the elementary schools is, on the whole, better than that in the high schools. Careful attention should be given to such work because corrections made at the board are of value to the whole class.

(f) Emphasis should be placed upon the preparation of teachers for this work. They must become familiar with the technique of their subject. Many of them have already learned the fundamentals of position, movement and drills. Their weakness lies in a lack of intensive knowledge of the technique. The committee recommends that teachers who give evidence of special preparation in writing be granted promotional credit. Thus, personal and professional skill will receive due recognition.

(g) Penmanship possesses value in itself but its distinctive worth is as a medium of expression in other subjects. Writing is necessary to determine the exact knowledge of the pupil, to train the aesthetic sense, to develop self-confidence, and to energize through the sense of power which comes from doing a thing well—the joy of achieving.

6. *Requirements of Business:*

Good penmanship is indispensable in securing business positions. To ascertain the opinion of business men concerning handwriting of the graduates of the Chicago public schools a questionnaire was sent to one hundred representative firms employing 8,614 persons in their offices. Some business houses keep no educational records of their employees and, therefore, could give us little aid. The following summaries are compiled from those replies which gave definite information:

	Yes	No
1. How many graduates of the Chicago public grammar schools do you employ?.....1939		
(a) Do you find their penmanship sufficiently legible?	1557	382
(b) Do you find their penmanship sufficiently rapid?	1572	367
2. How many graduates of the two-year commercial courses of the Chicago public high schools do you employ?	222	
(a) Do you find their penmanship sufficiently legible?	176	46
(b) Do you find their penmanship sufficiently rapid?	191	31
3. How many graduates of the four-year courses of the Chicago public high schools do you employ?	293	
(a) Do you find their penmanship sufficiently legible?	245	48
(b) Do you find their penmanship sufficiently rapid?	262	31

4. How many office employees have you? 8614
5. What percentage of these employees do enough handwriting to require them to be *rapid, legible* penmen?68½%
6. Do you find that the penmanship of the recent graduates of the Chicago public schools shows any improvement over that of former years? 1657 282

7. Conclusion:

The consensus of opinion among business men seems to be that ability in penmanship is an essential qualification for office positions. Since many reject applications which are not well written, skill proves a very important asset for the applicant. Owing to the fact that many business houses keep no record of the educational preparation of their employees, it would seem that much criticism in the past has been unfair in that many young people were employed who were not graduated from either the elementary or the high schools and who were, therefore, not the finished products of either department of the public schools. Those firms who employ a large number of persons and have kept careful statistics of the educational qualifications of their employees invariably have reported more favorably upon the penmanship of the public school graduates than those who have depended more or less upon general observation of the work of their employees.

The Chicago public schools authorized successively the Spencerian method of writing, which proved to be too elaborate for practical use; the vertical system, which though very legible was too slow and unhygienic to meet the needs of the students; and finally a system of muscular movement writing which seems to be meeting all demands. By careful distribution of emphasis on the subject of penmanship throughout the curriculum of both elementary and high schools, there is reason to believe that the Chicago public schools will graduate young people who can write legibly and rapidly and satisfy all the demands for proficiency in this subject.

The survey of penmanship was carried on by members of the educational department of the Board of Education and every effort was concentrated on making the investigation impartial and impersonal. Every phase of the work surveyed has been given a place in this report. The members of the committee have frequently expressed the opinion that the opportunity given them to observe the work in many schools and in all de-

partments has been of great value to them personally. The teachers and principals visited were eager to know how the work of their pupils compared with that of others and to receive suggestions from the committee. It is hoped that this report will be of assistance to those who were visited as well as to those who were not.

8. Statistical Summary:

The following tables summarize the 326 reports made by the members of the committee. Each school room visited was reported on separately and all items were marked, except endurance which was often difficult to measure fairly. Therefore, reports on it were left optional. The informal test was given first. The pupils were asked to write a lesson in some school subject chosen by the teachers, which in most cases was a form of English work. As far as possible they were not permitted to know that the penmanship was to be observed. After this a lesson in formal writing was given, consisting of six drills picked by the committee as a good test of the writer's general ability. Tables IV and V go into particulars concerning movement and position listed in Table II.

I.

NUMBER EXAMINED.

Grade.	4	6	8	Total.
Pupils	3882	3180	3824	10886
Rooms	89	77	91	257
Schools	80	80	80	80
Per Cent of School Membership	12.8	11.8	20.7	.....

	Commercial.		
	9	10	Total.
Pupils	576	148	724
Rooms	20	7	27
Schools . . . . .	...	...	17
Per Cent of School Membership	22.2	14.6	...

	9	Academic.		12	Total.	Grand Total.
		10	11			
Pupils	122	410	78	504	1114	12724
Rooms	5	15	3	19	42	326
Schools . . . . .	...	...	..	...	20	100
Per Cent of School Membership	02.2	11.7	02.9	21.6	....	.....

II.

FORMAL TEST.

Figures represent per cent.

Unit of Computation :—One Class Room.

Grade						Commercial.		
		4	6	8	Total.	9	10	Total.
Position.	Good.....	48.3	70.1	73.6	63.8	40.0	0.0	30.0
	Fair.....	33.7	27.2	25.2	28.7	46.6	80.0	55.0
	Poor.....	17.9	2.5	1.0	7.3	13.3	20.0	15.0
Movement.	Good.....	42.6	63.6	64.8	56.8	46.6	40.0	45.0
	Fair.....	40.4	33.7	35.1	36.5	46.6	40.0	45.0
	Poor.....	16.8	2.5	0.0	6.6	6.6	20.0	10.0
Forms.	Good.....	23.5	53.2	59.3	45.1	46.6	40.0	45.0
	Fair.....	51.6	37.6	39.5	43.1	46.6	60.0	50.0
	Poor.....	24.7	9.0	1.0	11.6	6.6	0.0	5.0
Speed.	Excessive.....	10.1	5.1	5.4	7.0	0.0	40.0	10.0
	Moderate.....	66.2	88.3	82.4	78.5	93.3	60.0	85.0
	Slow.....	23.5	6.4	12.0	14.3	6.6	0.0	5.0

II A.

RANKING TABLE.

Formal Test.

Grade		4	6	8	Total	Commercial		
						9	10	Total
Position	2nd	2nd	2nd	2nd	2nd	3rd	4th	4th
Movement	3rd	3rd	3rd	3rd	3rd	2nd	3rd	3rd
Form	4th	4th	4th	4th	4th	2nd	2nd	2nd
Speed	1st	1st	1st	1st	1st	1st	1st	1st

III.

INFORMAL TEST.

Figures represent per cent.

Unit of Computations—One Class Room.

Grade		4	6	8	Total	Commercial			Academic		
						9	10	Total	10	12	Total
Legibility	Good	26.9	55.8	67.7	50.0	38.8	71.4	48.0	20.0	26.3	23.5
	Fair	62.9	40.2	32.2	45.3	55.5	28.5	48.0	60.0	57.8	58.8
	Poor	10.1	3.8	0.0	4.6	5.5	0.0	4.0	20.0	15.7	17.6
Speed	Excessive	3.3	3.8	3.3	3.5	0.0	0.0	0.0	0.0	10.5	5.8
	Moderate	62.9	79.2	84.4	75.3	94.4	100.0	96.0	53.8	63.1	58.8
	Slow	33.7	16.8	12.2	21.0	5.5	0.0	4.0	46.6	26.3	35.2
Ease	Great	29.2	61.0	68.8	57.8	27.7	42.8	32.0	6.6	10.5	8.8
	Little	70.7	38.9	31.1	42.1	72.2	57.1	68.0	93.3	89.4	91.1

III A.

RANKING TABLE.

Informal Test.

Grade	Commercial				Academic					
	4	6	8	Total	9	10	Total	10	12	Total
Legibility	3rd	3rd	3rd	3rd	2nd	2nd	2nd	2nd	2nd	2nd
Speed	1st	1st	1st	1st	1st	1st	1st	1st	1st	1st
Ease	2nd	2nd	2nd	2nd	3rd	3rd	3rd	3rd	3rd	3rd

IV.

MOVEMENT.

(See Table II.)

Grade		4	6	8	Total.	Commercial 9
Direction	Good	43.8	62.3	69.2	58.8	53.3
	Fair	41.5	33.7	30.6	35.4	40.0
	Poor	14.6	3.8	0.0	6.2	6.6
Freedom	Good	29.2	63.5	62.6	50.5	53.3
	Fair	52.8	35.0	37.3	42.0	40.0
	Poor	17.9	3.8	0.0	7.3	6.6
Regularity	Good	26.9	62.3	59.3	49.0	46.6
	Fair	49.4	31.1	39.5	40.4	46.6
	Poor	23.5	6.4	1.0	10.5	6.6

IVA.

RANKING TABLE.

Movement.

Grade.		4	6	8	Total.	Commercial. 9
Direction		1st	2nd	1st	1st	1st
Freedom		2nd	1st	2nd	2nd	1st
Regularity		3rd	3rd	3rd	3rd	2nd

V.

POSITION.

(See Table II.)

Grade.		4	6	8	Total.	Commercial. 9
Body.	Good	43.8	64.9	70.3	59.5	40.0
	Fair	33.7	32.4	27.4	31.1	46.6
	Poor	22.4	2.5	2.1	9.3	18.8
Head.	Good	33.2	66.2	61.5	54.8	38.3
	Fair	40.4	27.2	32.9	33.8	46.6
	Poor	21.3	6.4	5.4	11.2	20.0

Grade.		4	6	8	Total.	9
Feet.	Good.....	40.4	57.1	59.3	52.1	40.0
	Fair.....	30.3	27.2	32.9	30.3	26.6
	Poor.....	29.2	15.5	7.6	17.5	33.3
Pen.	Good.....	39.3	63.6	71.4	57.9	33.3
	Fair.....	33.7	32.4	23.0	29.6	46.6
	Poor.....	26.0	3.8	5.4	12.4	20.0
Arms.	Good.....	44.9	71.4	75.8	63.8	40.0
	Fair.....	32.5	25.9	23.0	27.2	40.0
	Poor.....	22.4	2.5	1.0	8.9	20.0
Paper.	Good.....	47.1	70.1	75.8	64.2	40.0
	Fair.....	35.9	23.3	20.8	26.8	46.6
	Poor.....	16.8	6.4	3.2	8.9	13.3
Hands.	Good.....	37.0	63.6	70.3	56.8	33.3
	Fair.....	37.0	33.7	27.4	32.6	53.3
	Poor.....	25.8	2.5	2.1	10.5	13.3

VA.
RANKING TABLE.
Position.

Grade.	4	6	8	Total.	Commercial. 9
Body	3rd	4th	4th	3rd	1st
Head	6th	3rd	5th	6th	4th
Feet	4th	7th	6th	7th	3rd
Pen	5th	6th	3rd	4th	4th
Arms	2nd	1st	1st	2nd	2nd
Paper	1st	2nd	2nd	1st	1st
Hands	7th	5th	4th	5th	5th

WILLIAM BACHRACH, Chairman.
Elementary Schools.

- SIMON F. CASEY,
Teacher, Yates School.
- J. CATHERINE CUTLER,
Principal, Chalmers School.
- LILLIAN F. DOUGHERTY,
Teacher, Talcott School.
- ELEANOR R. DUNNE,
Principal, Hamline School.
- MARIE A. DUNNE,
Principal, Nobel School.
- WM. J. FRASER,
Principal, Spry School.
- JACOB H. HAUCH,
Principal, Lloyd School.

LUELLA HEINROTH,
Principal, Morris School.
J. EDWARD HUBER,
Principal, Kinzie School.
FREDERICK J. LANE,
Principal, Jenner School.
ELIZABETH L. MAHER,
Teacher, Washburne School.
FRANK W. RIEDER,
Principal, Burnside School.
ALICE M. RYAN,
Teacher, Foster School.
HENRY SUMNER,
Teacher, Parental School.

High Schools.

GRANT BEEBE,
Principal, Calumet School.
VALENTINA J. DENTON,
Teacher, Parker School.
IDA M. EDWARDS,
Teacher, Harrison School.
HERBERT C. HANSON,
Teacher, Tuley School.
HENRY F. KEEN,
Teacher, Marshall School.

ARITHMETIC IN THE GRADES AND MATHEMATICS IN THE HIGH SCHOOLS.

The committee held six meetings. It was decided to divide the committee into ten sub-committees. One school district was assigned to each sub-committee. The schools were visited between March 26th and April 20th. Reports of observations made during these visits were submitted in writing by each sub-committee to the whole committee. Three meetings were held to discuss the individual reports. The individual reports were then combined into the final report. One meeting was held to discuss the final report which is herewith submitted.

Fifty-three elementary schools and thirteen high schools were visited. Four hundred fifty-two elementary teachers and sixty-four high school teachers were seen at work. One sub-committee visited four elementary schools; the others five or more each. Three sub-committees visited two high schools each; the others one each.

General Character of the Teaching: The teaching is very individual, generally good, much of it excellent. The committee saw very little that could be called poor teaching. With very few exceptions the teachers show an excellent spirit and their purpose is the highest.

In the high schools the teachers showed good mathematical training and full knowledge of the subject. There appeared, however, to be less evidence of pedagogical training and skill than in the elementary schools.

Some of the committees saw new methods of presenting geometry and arithmetic which were especially deserving of commendation for the evident interest awakened and power developed.

Effect of Departmental Work: It is the opinion of the committee that there was not enough departmental work seen to serve as a basis for comparisons—where it was seen it was uniformly good. In some cases the best work seen in arithmetic was in schools where departmental work was the custom. In such cases it was evident that the teachers knew the subject and knew the preparation of the children. They approached their subject with confidence and a variety of methods. In some schools where departmental work had been abandoned the reason

assigned was the difficulty in filling the places of teachers who left.

In the high schools the best work was done by those teachers who had specialized in mathematics.

The Amount of Oral and Written Work: The relative amount of oral and written work which the committee saw, varied in different schools and in different rooms in the same school. In many rooms the committee saw *oral* work only, although they were given to understand that this was not the custom. Occasionally this occurred throughout an entire school. In many cases the oral work was rapid mental drill in abstract exercises, while in others it was review of tables of measures, and only rarely concrete problems. On the other hand, the committee sometimes saw written work only. In one case this occurred in five out of eight rooms visited in the same school. In the lower grades it was individual blackboard work. The teacher gave each child a different problem, and another when that was solved, and so on. In other classes in the upper grades the child worked from the text book going as far and as fast as he could, calling upon the teacher only when he felt that he needed help. In these classes practically all of the work was written; there were no recitation periods for mathematics, that is, no time when the *class* and the teacher discussed the subject. In this case the committee understood that this is the custom of the school. Usually the written and the oral work went together and supplemented each other. In the lower grades where this was the case, the recitation consisted of oral and board work. In the upper grades the recitation included also reports in problems previously assigned. In many cases rapid oral drill came at the beginning of the recitation. In cases where both oral and written work were seen in the same recitation, the sub-committees report from one-third to four-fifths oral work.

Amount of Home Work Called for: Of the ten sub-committees three report that no home work is called for in the schools visited; four report that a few teachers give a little home work but that most of them give none; two report that in many schools a lesson is assigned in advance of the recitation from the fifth grade up and that preparation of this lesson is expected, some of which must be done at home. One committee reports that about half of the schools visited assign home work.

Class Room Methods: (1) The committee was struck by the great amount of careful individual work done in the elementary schools despite the large classes. This was not so

pronounced in the high schools. In this connection two or three points are worthy of notice:

(a) In general there is more oral than written work and this is individual.

(b) There were in general no failures in recitation in the elementary schools. The "I don't know" seems to have disappeared. When a pupil is called upon to recite he keeps the floor until he masters the situation or he is seated and works out the problem and recites later, while the class in the meantime goes on to some other problem. Elementary teachers seem to be of one mind on this point.

Contrary to the custom in the elementary schools there seems to be a tendency in the high schools to let pupils fail if not prepared. Occasionally when a problem was wrong the teacher gave much time to the pupil who had failed until he saw and understood although in general this was not the case.

(c) There is a general tendency in the elementary schools toward keeping many pupils actively occupied during the recitation. This was more marked in the elementary schools than in the high school and somewhat more marked in the lower grades than in the upper grades of the elementary schools. In oral and mental work with new problems methods vary from concert work in which no attempt is made to discover who is right and who is wrong, to extremely slow individual work so conducted that every one waits for the slowest. Between these two extremes are various methods of calling for individual responses so carried out that no time is wasted, and yet the great majority of the class are given a chance to reply. In a few cases the responses were in turn. In other cases each pupil indicated in some way when he had solved the question and pupils were called upon until the correct answer was given. Occasionally a teacher did not allow time enough and once in awhile one was too slow, but in most cases this work was exceedingly well conducted. A large part of this work was seen in the middle grades. In the lower grades the responses were often organized into games in which all took part. In the higher grades the work was closer, the problems harder and time was allowed for reasons and explanations, so that fewer pupils took part. Occasionally the oral work was supplemented by explanations from the blackboard. Little or none of this work was seen in the high schools. When the work was entirely written every one was of necessity occupied. Some of the methods, however, are interesting, especially in contrast to some of the work in the higher grades, and much of that in the high schools where one pupil worked or explained and others listened.

The committee saw one fifth grade class of forty-nine at work, the majority of them at the board. One talked or explained while all worked. In another case one or two worked at the board and the rest at their seat on the same problem. Explanations were deferred until all had had a chance. These methods were effective only in so far as the problems given were so chosen that the majority of the class could get them right. In the lower grades where the problems were of such a nature that they could be corrected at a glance, the committee frequently saw an entire class at the board working individual problems. Little of this work was seen above the fifth grade except in the one extreme case of individual work where each pupil works his own way through the text, going to the teacher for help when he feels the need of it. In cases from the fifth grade up, when a lesson is assigned in advance, preparation expected and reports of it given in class, the problem of keeping everyone active is harder to solve. Some of the methods seen were not effective unless the pupils had the work for the problems in their hands. In one case one pupil worked the problem on the board talking as he worked, while the others listened. In other cases the problems were put on the board by different pupils during class time—while the others in the meantime were given oral and mental work. After all those at the board were ready the problems that had been worked out were usually read from the board, each problem being worked out by the pupil who had put it on. Sometimes in such cases there was no subsequent discussion of the problem. There were two very effective methods seen for reports of assigned work. In one school the pupils at their seats asked many questions of suggestion or information of the pupils working at the board and followed up the point until it was clear. In this case the explanation that followed was often made by some one other than the one who worked the problem on the board. In an eighth grade class the problems had been put on the board in outline only, in advance of the recitation. The necessary interpolations accompanied the explanations. In one school the reports of assigned work were given orally from papers previously prepared. The tendency in algebra and geometry classes in the high school is to have one pupil read the solution of an algebra problem or give a demonstration in geometry while all listen. In many cases this is followed by questions and discussions in which all take part. The committee saw some cases, however, where one pupil was allowed to keep the floor so long that the interest of the class was entirely lost.

(2) The committee differed on the value of games as a device

in the mathematics class. Some members of the committee saw games so conducted that time was wasted, interest was lost and little was accomplished. There can be no doubt, however, that this is not generally the case. When individual response to oral and mental drill in abstract operations was organized into a game in which different rows or different classes competed the interest was intense, the attention quickened and the device was an aid to accuracy and rapidity.

(3) Now and then a pupil talked while he worked at the board. The cases of this which the committee saw were so effective that they wished that there might be more of them.

In general the committee would say that they found greater opportunity for individual work and greater responsibility on the part of the individual child than they had dared to anticipate in a system where much work is necessarily formal and where classes fall little short of fifty pupils.

Review of Work of Previous Grades: In the elementary schools there is constant review, consciously or unconsciously, of number facts and operations as the subject is continuous and the treatment is more or less uniform at least throughout the grades of any one school. All of the sub-committees report having seen more or less of this review work. Only two report having visited schools where none of it was seen. Often some special plan for review is adopted. In some cases the first month in the new grade is given to it. In other cases a few moments is given to it at the beginning of each recitation. Where two grades are in the same room the classes occasionally recite together. In some schools the review is only incidental. On the other hand this review is sometimes carried too far. Your sub-committee report that in some schools the review is so constant that there is little time left for new work. In two schools nothing but review was seen. Primary work was seen in some instances even in the seventh and eighth grades. In another case it was reported that the result of continued review was that every room visited seemed to be a grade behind the normal. One sub-committee suggests more careful planning of the work from grade to grade to prevent wasteful duplication of effort. In some cases where no review work as such was seen the committee noted that the definite nature of the work done in the lower grades made it possible to adhere closely to the Course of Study in the upper grades.

One serious question in connection with reviews occurs between the eighth and ninth grades, especially in the Business Arithmetic of the ninth grade. Here pupils were found working slowly and with difficulty problems in percentage that the same

committee had seen worked easily by sixth and seventh grade pupils. In some cases the teachers did not seem to be adequately acquainted with the work in the lower grades so as to be able to make proper connections. There were several instances in which difficulty grew out of the teachers' enforcement of a particular method (perhaps the method of the author) without giving consideration to the method which the child chose naturally to use. Because of the child's knowledge of the subject under consideration he was familiar with certain methods. For example, in one class in Business Arithmetic in the high school, a pupil was asked to find $4\frac{1}{2}$ per cent of \$52.50. He multiplied \$52.50 by .045, but placed the decimal point wrong in the answer. Instead of leading him to find his mistake, the teacher criticized the *method*. Much time would be gained if ninth grade pupils were held responsible for sixth, seventh and eighth grade subject matter and this knowledge were made a stepping stone to the specialized new work and the more specific methods of Business Arithmetic. The student would not feel that his previous work was underrated.

Handling of the Subject: Every teacher knows that concrete illustrations of mathematical processes should form the introduction to every new principle and that after the principle has been established by ample illustration from material within the child's experience, abstract work should be sharp, quick and incisive and continue until the process becomes automatic for the child. In spite of this fact several of the sub-committees report that there is too much abstract and not enough concrete work; that the teaching is too much occupied with mechanical manipulations; that there should be more practical problems and more attempts to show the relation of mathematical processes to real life.

The present insistent demand for more emphasis in fundamentals in their practical applications, especially the demand of "business" that the schools shall turn out expert manipulators of figures, results in a tendency on the part of the teachers to over-emphasize the phase of the subject and probably accounts for the stress laid upon reviews. The ability to manipulate numbers rapidly is a power easily acquired, soon lost and easily re-acquired when necessary. To put special stress on the acquisition of such skill or proficiency can not but result in an irreparable loss in the more important phases of the subject and a sacrifice in the science of mathematics as a whole.

The tendency to be too abstract, to over-estimate the value of mathematical manipulations was also visible in high school work. The questions asked by the teacher in algebra and geometry classes often indicated a superficial handling of the subject rather than

a persistent effort to get at the fundamental principles. The fundamental principle in solution of algebra problems, namely that one must find two things that are equal was well brought out in one or two cases. In other cases the explanation stopped just short of the vital point. In algebra classes the committee noted a tendency to generalize too early which resulted in a mechanical following of rules without explanations rather than a comprehension of fundamental principles. The distinction between what is the use of a certain operation in algebra or construction in geometry and what right have we to perform this operation or construction was rarely brought out in questions.

Mathematical Form and Language: In abstract problems in the early grades the formal expression is clear and the equation is given, for example, 9 plus 5 equals 14; 8, multiplied by 2, equals 16. But in concrete problems and in problems for larger numbers, numbers beyond the tables, this form generally gives way to a form showing the work rather than a form indicating the method of solution. In many cases pupils do much indiscriminate figuring, working without plan or, if they have one, losing sight of it. In the sixth, seventh and eighth grades it causes a good deal of trouble and is responsible for much of the criticism heaped upon the elementary school by the high school. In the lower grades the cost of 24 pounds of butter at \$.42 a pound appears:

$$\begin{array}{r}
 \$.42 \\
 24 \\
 \hline
 168 \\
 84 \\
 \hline
 \$10.08
 \end{array}$$

instead of:

Cost of 24 lbs. equals $24 \times \$.42$ equals \$10.08.

As the problem grows more involved the formulation of expression continues along the same line, the mechanical work in evidence rather than the logic problem. In the seventh and eighth grades there was a very evident tendency in several schools towards formulation, indicating logic rather than mechanics, but in many cases it was a mere tabulation of results in which the work of division, multiplication, and so on, which was much in evidence in the intermediate grades had disappeared. One committee reports a strong tendency to formulate problems in mensuration while other kinds of problems are set forth to the eye with the process in evidence and the logic obscured. In a few cases the sub committees report excellent mathematical expression. In one

school from the fourth to the eighth grade all processes were indicated and the meaning of the equation observed. One eighth grade class gave orally this expression for the area (in square feet) of a table where diameter was given as 54 inches. The number of square feet in the area equals

$$27 \times 27$$

$$144$$

Another class in the same school was given similar expressions in written work. One seventh grade class used such forms as this:

4-5 of Money equals \$1.20.

Money equals $1\frac{1}{4} \times \$1.20$ equals \$1.50.

or

4-5 M. equals \$1.20.

M. equals \$1.50.

It is interesting to note that the very best work that the committee saw was accompanied by the very best mathematical expression or formulation. The committee thinks that perhaps one of the causes of the long step between the eighth and ninth grades is due to the difference in formulation or mathematical expression of problems. In algebra and geometry classes in the high schools the written mathematical forms and the oral expression were not so generally accurate as the committee could wish.

Correlation and Practical Problems: The necessity of making mathematics as concrete as possible, the fact established by psychologists that power gained in one subject is not transferred to some other subject or to the general activities of life except by the conscious activity of the mind itself, make effective correlation incumbent upon every teacher. This correlation can be effective only where teachers of different departments confer. Correlation will then allow more time for hand work in the arts and furnish material of the highest type for the mathematics.

Many real problems, vital to the pupil at the time of solution from the manual training shop, the domestic laboratory, the geography and nature class rooms and various activities of the school would find a place easily in the mathematics class, their greatest value being their reality. The text book has pages of this kind of problems that were vital to some one at some time, but lack the interest of real problems to the pupils who are solving them now. All problems cannot be real, but enough might be to give the right attitude of mind toward problems. Many such problems are essential to the best work in mathematics; through them the child gets a keen individual interest in mathematics; he sees the place of number in his own life. Through them he gets initiative,

independent method of solution, real interest and attention to the subject versus class interest and group attention. These problems should be worked out in the mathematics class; they belong there. Whenever they involve any new number relations they should come under the direction of the teacher of mathematics. These real problems are the backbone of the course in mathematics and the best special teacher of mathematics is looking for them.

In the middle and upper grades of the elementary schools there was little conscious correlation seen in the mathematics classes between arithmetic and the manual training, sewing or cooking. What little correlation between these subjects was seen was forced, unnatural, and wasteful of time. One member of the committee visited sewing and manual training rooms and found there much good correlation with mathematics. In the sewing room pupils were required to measure the amount of cloth or lace necessary for the garment to be made and to compute the proportionate cost of the amount cut off to the cost of the entire bolt. In the manual training rooms pupils were required to compute the cost of objects made by computing the cost of lumber, varnish and so on used. This might for example include the proportionate cost of a part of a can of varnish. The best teachers of mathematics will search in every department of the school for the best material for her work.

In arithmetic classes much work directly and consciously related to the life and surroundings of the pupils was seen. These were not problems from their text, but individual problems made by the pupils themselves. In one room pupils were computing the amount of moulding necessary for rooms in their own homes, having previously taken the necessary measurements. In another room pupils had been taught to make and read gas meters and were working with bills which they had made from their knowledge of the conditions in neighboring stores or in women's exchange work. In other schools problems were found relating to the various activities of the neighborhood, such as filling streets, laying walks, buying and selling houses, borrowing money to build and the like. One teacher wishing to make her pupils proficient in the multiplication of mixed numbers had opened a "ribbon counter" at which one pupil was buying, another selling, while the entire class figured the cost.

Very little correlation was seen in the high schools except between shop mathematics and mechanical drawing in one high school. This may be largely due to the fact that the mathematics teacher is not equally conversant with other subjects and does not

see or know the points of contact. If it is not absolutely true that teachers of geometry teach only geometry, and of algebra only algebra, the tendency is in that direction. Here is a point where correlation is possible to a large extent, but is very little practiced, possibly partly because of the nature of the text books and time and strength required to collect and mimeograph supplementary problems, partly because the more experienced teachers are in charge of the more mature pupils. A division of the work by which every teacher met pupils of different grades would seemingly improve the teaching from a pedagogical standpoint.

Interest: The various sub-committees report that the interest shown in classes in the elementary schools visited varied from intense in three cases to ordinary in two cases. When variations occurred in the same school, the committee noted that the personality of the teacher or the methods used were exceptional. In general the opinion of the committee is that the responses of the classes to the work in hand is remarkable. The children were in a receptive state of mind, alert, loyal and in earnest. This was true throughout the grades of each school and throughout the various schools.

The various committees report that the interest shown in the high school classes was in general less than that in classes in the elementary schools. It was always good and respectful, rarely intense. Where the interest was best it seemed to be due to the method of conducting the recitation, as in a geometry class where pupils asked questions and spoke to each other about the work.

Development of Power: The power developed in pupils in different schools seems to vary in kind and amount. Occasionally a sub-committee could find little or no evidence of power developed in pupils. In other schools the development in power is more marked. In many cases the committees report that the development is largely in power to obtain quickly accurate results to abstract exercises. In other cases where the power to reason is more marked especial attention is given to the solution of concrete problems. In some rooms advance problems are explained as to method only without obtaining results. The committee is of the opinion that more attention should be given to the development of sustained, continued thinking through the use of concrete problems. In some schools the development of power seems gradual and continuous. In others it goes by leaps and bounds. In some cases it is evident that this is due to especially good teaching or to special attention to the power to reason in the upper grades. In one school where the eighth grade seemed to go forward with a

giant stride, there was more initiative allowed than in the middle grades. The lower classes in this school have much opportunity for free independent work. In the eighth grade this freedom backed by the more formal work of the middle grades results in excellent work. In other schools where the development of power is evident in the second and third grades and again in the eighth or the seventh and eighth grades, what happens in between is not so evident. In other schools the committee noted the strength and development more gradual.

An interesting question comes here while discussing development of power. Does the power developed by quick oral work transfer to the written work and does it persist? Some of the sub committees found third, fourth, fifth and sixth grade pupils doing very difficult abstract exercises, without pencil. This included the fundamental operations with integers and operations with fractions. But the same class and the more advanced class in the same school did simple pencil work with difficulty. This carrying over of power is a vital point here for if this power does not carry over and does not persist, a great deal of valuable time is wasted throughout the school system. In many cases the committee would say that there is little transfer to the written work of the power gained in the oral work. Is it due to the method used, to an isolation of oral from written work, or is there a different treatment in the written work?

Initiative: While a very few cases were reported in which it was necessary for the teacher to take the initiative in solving problems, in general pupils attack problems vigorously. There was little hesitation; each child assumed the responsibility; there was no shirking and no dependence upon one's neighbor or the teacher. This was especially true in classes in which pupils made their own problems or in which the problems had a clear practical meaning. In many recitations half or more of the time was devoted to problems not previously assigned. In many cases the visitors proposed new problems. Only once or twice did the pupils fail to find a satisfactory solution. In many cases, however, there is a general class method for the solution of given problems, which curtails the opportunity for initiative. Often the committee looked in vain for the question "Are there any other ways to do this problem?" Again pupils were occasionally told to stop and think where time and conditions favorable to thought were lacking. In the early grades there were many approaches to the fundamental processes. In general the committee is of the opinion that pupils should be encouraged to do problems by a variety of methods and that time and opportunity for thought should be

given. With smaller classes and more real problems growing out of their own lives and work, there would be still greater opportunity for initiative in attack and method of solution.

One committee reported a case in which one would suppose that great opportunity for initiative would be developed. The children work the problems in the arithmetic each for himself, going as far and as fast as he can, consulting the teacher privately when he feels that he needs help. The children work after the method of the author or each after his own method, but each one works. There seemed to the committee to be less intensity here than in groups having recitations and less power to attack new problems.

One committee reported that arithmetic and algebra classes in the high school were often so conducted that no opportunity for initiative was given. In two classes the "model" was given by the teacher, once in arithmetic and once in algebra and again a revised model. The teacher said, "I want you to follow the model." It was a new subject. The process of long division in algebra had been presented by the teacher to an algebra class. In most algebra classes the children worked out assigned problems on the board in much the usual way. No variety of methods was called for or offered.

Geometry seems to offer greater opportunity for initiative. In one small class of boys there were several proofs offered for each of two theorems. There were several independent attacks made in a class in solid geometry.

Summary: On the whole the committee found the teaching of arithmetic in the elementary schools good; far better than they had anticipated. They were struck by the great amount of careful individual work done and by the responsibility assumed by the individual child despite the large classes where much work is necessarily formal. They wish to commend many new and effective methods seen. If the pupils do not get a reasonable knowledge of arithmetic in our elementary schools the cause must be sought elsewhere than in the teaching in the schools visited. In some cases the committee saw much formal review and would suggest more careful planning of the work from grade to grade. The committee saw too much abstract and not enough concrete work in many cases. The present demands of "business" that the schools turn out expert manipulators of figures is liable to result in irreparable loss to pupils.

The committee is of the opinion that if mathematical forms and language were more carefully exact throughout, time would be saved and power gained.

The committee is of the opinion that there should be more real problems. If groups could be smaller and there could be closer correlation (natural not forced) with other subjects, there would be greater initiative developed, and keener individual interest in mathematics. These opportunities may come with the new course of study wherein the longer time given to one subject permits the mathematics of that subject to receive attention and the problems involved to be solved.

The committee questions the value of so much oral and mental abstract work divorced from the written and concrete work. If the power gained in the oral work does not transfer to the written work (as seems probable) or does not persist, much time is wasted throughout the entire school system.

The committee is of the opinion that children should be encouraged to do problems by a variety of methods and time and opportunity should be given for thought.

The committee is at a loss to account for the general overlapping of the work in the elementary schools and the high school business arithmetic.

A more generous equipment for teaching the subject should be furnished.

R. M. SMITH, Chairman.

Elementary Schools.

JANE S. ATWATER,
Prin. Sheldon school.
ANNA E. BECTIN,
Head Asst. Ogden School.
ELEANOR CHITTICK,
Head Asst. Emmet School.
SARAH A. FLEMING,
Prin. Jungman School.
ANNA S. HIGGINS,
Head Asst. Gallistel School.
CORA E. LEWIS,
Prin. Bismarck School.
KATHERINE D. MURPHY,
Teacher, Ryder School.
ROBERT NIGHTINGALE,
Prin. Burns School.
MARIANNA O'BRIEN,
Teacher, McLaren School.
G. A. OSINGA,
Prin. Delano School.

WILLIAM SCHUCH,
Prin. Yale School.
JENNIE P. SORENSON,
Head Asst. Taylor School.
JOHN H. STEHMAN,
Prin. Avondale School.
JOHN H. STUBE,
Prin. Burr School.

High Schools.

GEORGE M. CLAYBERG,
Prin. McKinley High School.
AGNES B. MACNEISH,
Teacher, Lake High School.
EDWARD MORGAN,
Asst. to Prin. Senn High School
GEORGE H. ROCKWOOD,
Prin. Austin High School.
MABEL SYKES,
Teacher, Bowen High School.

GEOGRAPHY AND NATURE STUDY.

The committee visited some seventy different schools, located in all parts of the city and included in the ten school districts, and heard some 350 recitations. The membership of these schools included pupils of every class, from those of the favored wealthy to the children of the recent emigrants in the most congested quarters of the city. Their various environments typified the extreme of conditions that our public schools are laboring to bring into some kind of unity through the medium of a common curriculum. No effort was made to select schools of known excellence in the subjects under consideration. It was believed that a group of schools taken almost at random would better represent the average standard of ability in teaching, and it was that the committee were anxious to investigate.

The first meeting of the committee with their chairman was given to a discussion concerning the point of view from which the survey was to be taken. Each member of the committee was asked to submit an outline of points to be observed during the coming visit. These outlines, summarized and put into shape by the chairman, were used as a general guide during the survey and served to make the combining of the final reports a less difficult task. It was the consensus of opinion that knowledge per se was not the only, nor the highest, purpose of instruction; that the method of studying a subject that would aid the pupil in the formation of right mental habits and that would give an early "set" to character building tendencies was the thing of supreme importance. Geography and nature study held in their content great possibilities along these lines and to the degree that the teacher recognized this and prepared her lessons in accordance therewith, was her work to be considered excellent or otherwise. The importance of acquiring facts was not to be underestimated, but the way in which the pupil arrived at them, whether through mechanical memory drill or by "abundant association in chains of thought touching industry, commerce and natural law," was to be considered. The outlines indicating generally the lines of observation were as follows:

Geography Suggestions.

1. *Materials used for strengthening images of pupils:* Maps, globes, sand tables, models, pictures, slides, books, collections,

etc. Are excursions taken by classes? Are physiographic processes (if any within walking distance of school) utilized? Are industries, libraries, museums, greenhouses, etc., similarly situated, used?

2. *Organization:*

Teacher—

- a. Plan and preparation. Use of text book. Use of material.
- b. Is she too much in evidence?
- c. Do her questions call for isolated facts in answer or does she present opportunities for pupils to reason? Are casual relations emphasized? Does she approach topic from child's point of view—or from her own?

Pupil—

Quality of answer, mechanical repetition or interest and appreciation of subject.

Initiative shown in questioning and doing.

Blackboard drawing, modeling, etc.

Retention of vital points—showing appreciation of values.

Working knowledge of physical and political geography of countries studied. Spelling and pronunciation of geographical terms. Ability to read and understand maps—physical and political.

- 3. Correlation of geography with other subjects.
- 4. When home geography is being studied, is attention given to more than place geography?
- 5. Are pupils being made aware of conditions—material, social and civic, in their own communities?

Nature Study Suggestions.

1. In schools visited, how many and what grades are doing anything that can be called nature study?

2. Is it taught as a separate subject? How correlated? Materials use? Does environment furnish materials?

3. *Organization:*

- a. Plan, preparation and method of teacher.
- b. Interest and initiative of pupils.
- c. How is work done?
 - a. Retelling secondhand experience.
 - b. Teacher doing the work—pupil observing.
 - c. Pupils doing the work, having firsthand experiences.

4. Does work ultimate in tangible benefits to school, home or community? The expression "tangible benefits" refers to gardens, window boxes, bird houses, ventilation appliances, thermometers, fly-traps, electric bells, etc.

At a subsequent meeting of the committee, in which reports were made of work seen during the week, the "Attitude of the visitor, as a factor affecting the quality of the work observed" was discussed. The great danger of seeing only imperfections when engaged in the work of criticizing was dwelt upon and the value of first considering effort from the *constructive* standpoint was emphasized. It was agreed that teachers and pupils do their best work when at ease and assured of the sympathy and co-operation of the visitor, and it was decided that, if it could be done without interfering with the teacher's own presentation of the subject, the visiting guest should enter into the spirit of the class and contribute his or her share to the general fund of information, or partake in the discussion with the teacher and pupils.

To our mind, one of the best and most unusual features of this unique survey has been the fact that teachers, not overawed by the presence of some great expert, have communicated their difficulties and perplexities freely and have often asked for help that was fully accorded them whenever possible. The fact that the elementary teachers themselves participated in the survey has made it easy for the teacher of the class to ask her visitor in entire good faith, "Now, as one teacher to another, tell me candidly what you think of this lesson? What are its weak points and how can I make it better?"

A class in geography, reciting on the topic of lumbering, had a confused idea of the work done in a Northern lumber camp, which even the excellent pictures used did not clarify. The visitor observing this said, "I was brought up in Manistee, Michigan, and visited lumber camps frequently during my girlhood. Will you let me explain this to you?" Immediately, she became one of the class with teacher and children and the information imparted was only less important than the spirit of helpfulness which converted the dreaded surveyor into the co-operating friend.

In almost every school visited, in conversations held with principals and teachers, there was an interchange of helpful suggestions and ideals, which benefited not only the observed, but the observer and gave an impetus to the work, which we feel hopeful will be evidenced in the better teaching of these subjects during the coming year. One of the visiting principals remarked, "I do not know how much my visits have helped the classes I inspected,

but of this I am certain, my own school will reap the benefit of what I have seen, and geography and nature study will be taught during the coming year as never before."

In every school good work and poor work were seen. This lack of uniformity, while it indicated large freedom on the part of the individual teacher, raised the question as to whether some intelligent and more specific direction might not, without inhibiting initiative, improve the general quality of the work. In one school, where outlines containing minute instructions issued from the principal's office, the work, although uniform in character in the different rooms, was especially formal and dead in quality. How to avoid this result; how to secure individual, educational work, and at the same time preserve the amount of uniformity considered necessary in a great system of schools, is the question that is not yet answered.

A practice prevails of allowing pupils to conduct the recitation by asking one another questions. We have seen this method work admirably and to constructive ends when rightly guided by the teacher, and we have seen a great deal of time wasted when pupils had no perspective of the relative value of the points involved and the teacher made no effort to organize the work by skillfully interposing questions, which might serve to bring the isolated facts into orderly sequence.

In two sixth grades, side by side in the same school, the geography classes were as widely dissimilar in methods of work as though they were conducted on different planets. In one the work was mechanical repetition of the words of the text, the entire attention of the teacher being given to the quality of English spoken. In the other, the pupils, alive with interest and with a clear recognition of the relative value of the topics under consideration, conducted the class themselves. They had previously submitted to the teacher the questions they were going to ask and she, by suggestion, had brought about some needed changes. Pictures, maps, globes, reference books were used freely and intelligently by the pupils and chalk modeling at the board, done by the pupil while talking on his subject, all combined to make this a memorable recitation.

In a seventh grade class, the subject was Switzerland, a fine type of a manufacturing region without coal. A comparison of the manufacturing processes in France, Germany, United States or Great Britain, with those in Switzerland would have made a fine topic illustrating casual relations, but no such comparisons were made. Climate as to altitude only was spoken of—nothing about the modifications by storm centers over Germany given

in the text, and affording such fine work on meteorology when enriched by reference to maps in the early part of the geography.

In fourth grade geography, in the majority of cases, attention to place geography only was paid. In one instance, the teacher had her own maps of the state and of the school district for pupils to copy. In another class, the better plan was followed of having the pupils make a class map. They measured the room and spaces and on a black cloth, spread on the floor, drew a plat of the room to scale, each child locating his own seat. The map of the school yard was made in the same way. Effective suggestions on a study of neighborhood conditions might have followed, attention being called to streets, housing conditions and need of parks. A comparison by means of pictures of better neighborhoods, might have proved an incentive to some children for bettering conditions in their own neighborhood.

The above illustrations indicate something of the quality of work seen and the kind of comments made upon it. I summarize below the observations made in common by members of the committee:

Supervision: The supervision of geography and nature study by district superintendents and principals was apparently neither as close nor as helpful as it was of other subjects in the curriculum. This was evidenced by the very marked differences observed in the quality of work done in different rooms of the same school and in different schools of the same district.

Recitations: The majority of recitations heard called for mechanical memory work and place geography—to the neglect of causal sequence. The working knowledge of political and place geography and the spelling of geography terms is good.

A minority of superior recitations left nothing to be desired in plan, purpose and results attained.

Materials: Political maps were seen everywhere. Physical and relief maps were not as numerous and there was a notable absence of large globes and sand tables. Picture libraries and museums were comparatively few and their intelligent and frequent use is a matter of question.

Some excellent work was being done with stereopticon slides, but at necessarily infrequent intervals. Reference books were limited both in number and range of selection, and not enough geographical readers were in the hands of the pupils.

Differences in amount of material in different schools were very marked, some having quantities, well arranged and effectively used, while others had practically none.

Excursions: Few excursions of any kind had been taken, nor was available geographic material, in the immediate vicinity of the school, used to any extent.

Correlation: In comparatively few cases was geography correlated with history, literature or civics. Its obvious relation to nature study was more frequently shown, but in the main, it was an isolated topic.

As a result of observations made upon work during the survey, the committee recommends as follows:

1. That a more helpful supervision of geography and nature study, emphasizing fundamental educational principles, rather than details of method, be given.

2. That, as far as is possible, the work in geography and nature study be departmental.

3. That an exchange of visits between teachers be provided for and encouraged.

4. That excursions by classes, accompanied by experienced teachers, to places of interest connected with these subjects be a regularly planned part of the work.

5. That some systematic plan of collecting, distributing and using illustrative material be followed in the schools.

6. That as far as possible the special training in geography and nature study now given in our Teachers College be utilized by placing the incoming young teachers where they shall have opportunities to use this training.

7. That attention to home geography be continued in the fifth and sixth grades.

8. That the closer correlation of geography with history, civics, literature and other subjects should be made wherever possible.

9. Finally, that a permanent nature study and geographical committee be appointed, whose duty it shall be to plat the city and its surroundings; show what material can be found; tell where and how to reach it and consult with all transportation lines, with the view of getting reduced rates and special accommodations for classes wishing to visit the various sections. A comprehensive excursion plan would be worked out, which would open up a new field of investigation for nature study and geography.

On the Subject of Nature Study.

The committee reports as follows:

1. That with a few marked exceptions, nature study in the elementary schools is rarely considered a vital part of the school

curriculum and more rarely still shows any serious attempt at presentation in a logical and effective manner.

2. That the teaching force, however well fitted by training or temperament to present the subject, is not able to do the same justice because of the limitations surrounding it.

3. That the materials and equipment, including permanent collections, window boxes, wardian cases, garden facilities in summer, and *rooms continuously warm in winter*, books, pictures and other accessories are wholly inadequate for a reasonable presentation.

4. That, in short, the idea does not prevail that nature study is a means of cultivating clear and correct observation and ability to correlate cause and effect, of inducing logical reasoning, of keeping alive the inherent love of the esthetic, of appealing to all that is best and most elevating in our nature.

We recommend, as a result of our findings:

1. That the subject be given a position commensurate with its vital, economic and educational importance.

2. That it be taught as far as possible departmentally and by those specially fitted by training and interest.

3. That those teaching the subject be given opportunity to visit such schools as take an enthusiastic interest in the study.

4. That sufficient materials and equipment be provided, including garden facilities in summer, and room or rooms continuously warm in winter, to insure a growth in plants that will encourage teachers and pupils to persistent effort in their cultivation.

5. That nature study throughout the grades correlate with and enrich geography in planting and caring for plots of cereals, fiber plants, and forage crops; making expeditions to park flower gardens, nurseries and nearby truck farms; observing weather conditions and seasonal changes; and studying electricity and mechanical forces in their relations to problems of commercial and industrial life.

6. That the economic activities of the city be utilized in their relations to human welfare and their vocational opportunities. Among these activities are the great city parks; the great truck gardens surrounding the city; the conservatories of the parks; the commercial greenhouses; and many model private grounds—each adding its testimony to the fact that there are abundant and beckoning opportunities for the florist, fruit grower, farmer, dairyman, forester, landscape gardener, commercial grower of vegetables afield or in the greenhouse, head gardeners, farm superintendents, and a host more that will relieve the

cities of their floating, menacing population, increase the productive resources, and purify in many ways the body social and politic.

KATE S. KELLOGG, Chairman.

Elementary Schools.

HARRY T. BAKER,
Principal, Fiske School.
ELEANOR CULL,
Teacher, Farragut School.
ELEANOR HAMPTON,
Teacher, Albany Ave. School.
THOMAS C. M. JAMIESON,
Principal, Goudy School.
ORRIS J. MILLIKEN,
Principal, Worthy School.
ANNA PYNE,
Teacher, Pickard School.
ARTHUR O. RAPE,
Principal, Ray School.
SARA C. ROCHFORD,
Teacher, Hedges School.
EDITH P. SHEPHERD,
Principal, Warren School.

High School.

HERMAN S. PEPOON,
Teacher, Lake View High
School.

HISTORY.**Outline for the Committee on Elementary Schools with Summary of Reports from Seventy-two Schools.**

Is there an organization of the celebrations in connection with the patriotic holidays, which results in a knowledge of History? Yes, 53; No, 19.

Which holiday is singled out for emphasis?

Are the patriotic songs a means of cultivating a love of country?

Are the patriotic poems memorized by classes or by individuals?

Has the school a collection of historical pictures?

Are any of the decorative pictures historical in character?

Has anything in the way of Pageant been organized? If so, note its character.

Is there a well selected supply of supplementary reading material? Yes, 50; No, 22.

Has the school a supply of library books bearing on History? Yes, 29; No, 43.

Does the school make use of the facilities offered by the Public Library? Yes, 43; No, 29. By the Historical Society?

Is the principle of the three text book plan recognized? Yes, 61; No, 11.

A list of patriotic poems suitable for different grades.

Some of the best supplementary readers bearing on History.

Some of the most suitable library books presenting historical material.

Is training for civic responsibility manifest? Yes, 60; No, 12.

Did the registration of the mothers bring out the necessity and advantage of naturalization for foreign born people? Yes, 43; No, 29. Several of these 29 schools are American.

The recitation in History:

1. Was it inclined to be formal or memoriter? Yes, 19; No, 48.

2. Did the teacher depend upon volunteers?
3. Did the recitation develop "initiative"?
4. Were formal written tests in evidence?
5. Did the lesson lead into questions of the day?
6. Did it start with a question of the day?
7. Was there evidence of organization on the part of the teacher? On the part of the children? Yes, 58; No, 14.

The leading aims in history teaching are to secure appreciation on the part of the children of the hardships of the pioneers, to build up ideals of leadership, and to enable the young citizens to regulate their own conduct for the good of the community. The nature of this work renders it inadvisable to arrange a scale of measurements such as is used in determining efficiency in penmanship, spelling and mathematics.

"Doubtless we think with only a small part of our past, but it is with our entire past, including the original bent of our soul, that we desire, will and act. Our past, then, as a whole, is made manifest to us in its impulse; it is felt in the form of tendency, although a small part of it only is known in the form of idea."

The younger children must get a great deal of the historical past from incident, story and biography. As the children move on in the grades, reading and discussion must ever be the methods of advance. The young soul, feeling the impulse of Columbus' persistence, George Washington's triumph over difficulties, Abraham Lincoln's spirit of justice, is gathering a past whose ultimate future cannot be measured by a finite committee.

A committee of eight members and the chairman have visited seventy-four elementary schools; a committee, consisting of seventeen members and the chairman, have visited the twenty-one high schools. In every case, the visitors have been received with marked courtesy, and every effort has been made to give them an adequate idea of the actual work done. Both committees have considered first, the equipment of each school for instruction in history and training in civics; second, the appreciation of the objects of the study and training, and the degree of efficiency secured by means of the equipment at hand. Meager equipment has not always been found to interfere with success.

The belief of the school people in the value of arousing the emotions is so strong that but a single principal considered the

patriotic celebrations empty. In many of the schools, the celebration for each of the patriotic holidays is prepared; it takes place on the day preceding the holiday and is colored by the nature of the patriotic day. The upper grade children are responsible for one hour and the lower grade children for another. In some schools this work has been so organized that the preparation does not fall heavily upon any one teacher, nor are the children of all the school frequently diverted from their regular work. The element of expectation and subsequent surprise for the ones who are to act as audience is a wonderful incentive to those who take part. Where the setting of the historical event makes it vivid and concrete, the impressions are lasting. Dramatization, pageant, song and recitation lend themselves to this phase of history work. In a few of the schools, the visits happened on the regular assembly days. The assembly songs were well rendered; many of the classes and individuals were prepared with recitations, including the flag salute, the civic creed, the Gettysburg Speech and patriotic poems. The opportunity for the principal or some visitor to bring before these children their civic duties was improved.

Dramatization and pageant are not general. Where these means have been used the results pay for all the time occupied. The explorers, our American pioneers, our Indians and our patriots took part in scenes that appeal to the imagination and strengthen the purpose. One teacher prizes the dramatization because it enables her to secure team work from the children, who see a unified whole, in which every child has had an opportunity to take part. The excursion to the library and to magazines, the study of pictures in order that the costumes may be fitting, the impersonation of the heroes, all contribute to the historical feeling and to the historical knowledge of the children. The home resources that are discovered on the occasion of a pageant tend to enlist the interest and sympathies of the parents. Indian baskets, bows and arrows, a tomahawk, leggings, a buffalo robe, articles which have been prized by older members of the family, are pressed into service, and the pride of the contributors enters into the success of the play. A sixth grade class began, in the presence of a visitor, the preparation for a dramatization of the life of La Salle. The children were asked to plan the successive scenes, naming the persons who should appear and telling what they would say. The place of each meeting and the surroundings were debated with energy and interest. The children referred constantly to their texts. There was no difficulty in regard to their understanding the language, for a misinterpretation was immediately corrected by some zealous member of the class. La Salle as a teacher gave

opportunity for a number of his pupils to take part; La Salle at court gave promise of a brilliant scene, in which it was evident that the class had decided upon the royal actors. The teacher of this class had previously dramatized Washington's return from a visit to the forts, and also an Indian legend. For the latter, another teacher had composed appropriate music. The LaSalle dramatization promises an amount of history reading and investigation that will be exceedingly profitable to all concerned.

In some schools the decorative pictures for the corridors and walls have among them a liberal sprinkling of those of a decidedly historical character. Betsy Ross, the Pilgrims going to Church, Priscilla and John Alden, the Spirit of '76, the Surrender of Cornwallis, Lincoln with his Cabinet, Scenes in Congress, pictures of the Capitol and of other public buildings in Washington, all tend to dignify the knowledge of national life. In some schools a fine collection of stereoscopic pictures plays an important part; many teachers have had the children make collections of historical pictures which have appeared in magazines and in newspapers. The children in many cases prepare the talk beforehand and come able to give the stereopticon lecture.

An appreciation of the cartoons gives evidence of a considerable knowledge of history and historical literature. "Hit the Apple, Save the Boy" met with an immediate response of the story of William Tell.

The Daughters of the American Revolution have from time to time placed pictures and statuettes in the public schools. Thirteen copies of the Minute Man and seventeen of George Rogers Clark have been given to schools. The presentation of the George Rogers Clark statue has in each instance given a decided impetus to the study of the part taken by this hero in the early history of the country.

No feature of the work in the upper grades has elicited more discussion than the use of three text books; no feature has resulted in greater progress for children and teachers. It is not possible for a class which has used intelligently the three text books to recite in a formal, memoriter style. The inclination to do this is turned by some child who has read a different presentation in his own book or in one of the numerous texts at hand. The natural consequence is that the children are not satisfied even with the three books. They are enthusiastic borrowers from the Public Library; they contribute incident and story. One sixth grade foreign boy announced, with considerable pride, that he has seven history books at home; he had identified himself with George Washington. In some schools the teachers considered the multiple

text book plan the only way to get good results in history; the ability of their children to use books and to become independent in thinking is marked. The three text book plan has not always had a fair opportunity. Where the teacher borrows from an adjoining room, so that all the children may use the one text book, the principle of the three book plan is violated; where books are borrowed so that all the children may use the different books, the response justifies the experiment. The formal recitation of the children betrays the narrowing to a single text, even when the three text books are distributed around the class; child after child repeats a statement in the words of the favored book.

In the eighth grade and in the high school, the training and development of the reasoning faculties should be added to the aims of history teaching in the preliminary grades. The power to weigh and consider, the judicial attitude of mind, the ability to investigate and even suspend judgment for a time, should be secured from the adequate teaching of history. The use of a number of texts is absolutely essential to the carrying out of this important aim.

In some schools the wise expenditure of the supplementary reading money has provided a liberal supply of reading matter which is available for work in history. In other cases, a small but well selected stock serves an excellent purpose. The text books in reading afford excellent material in history. The account of the Easter Egg Rolling in Washington found in the Primer locates definitely the seat of the Federal Government. The First Reader gives George Washington and the Flag. In the Second Reader there are eight history selections; in the Third, four; the Fourth Reader presents thirteen prose selections and four poems; in the Fifth Reader there are over thirty selections which bear directly upon history. Lucretia's Experience with the Red Coats, the Blue and the Gray, and the Perfect Tribute are all definite in time and place with children in certain classes. How the members of other classes have read these selections without realizing the historical part of them is a mystery.

The Public Library has proved a valuable adjunct. The teacher is at liberty to make a selection in the month of August. She receives fifty books which remain with her children for an extended period. Then this set is exchanged for another. Teachers who are desirous of having history material are accommodated so far as the limited resources of the Library permit. The Historical Society affords opportunities which no young people can afford to miss. The collection of material bearing on the history of Chicago and the lectures which have been offered have drawn

many children to the building. In classes where the delegates return and give an account of their visit, the children are interested and helped.

So much of history is presented in the patriotic poems that more of them should be included in the poems to be memorized. Their literary flavor is highly desirable. They lend themselves to the concert recitation. Children who would be shy about reciting alone are encouraged to memorize and recite with a class.

There is a considerable degree of training along civic lines. The flag salute and the civic creed are good material for memorizing. Through the study of the activities of the policeman, the fireman, the postman, the President, the children become familiar with the City and Federal governments. Springfield and the movements of the Governor bring before them something of the State organization. The county organization is known to comparatively few, although our County institutions are prominent. The special interest of principal or teacher in the Park System sometimes enlists the interest of the children. Studies of the baker, the milkman, the builders, furnish rich educational material and inspire respect for useful labor. There is a very general effort to have the children feel their responsibility for obedience to law. Through the consideration of Woman Suffrage, the facts in regard to naturalization and its benefits were fully discussed. Citizenship means not only power to vote but also admission to sundry occupations sufficiently honorable to be reserved for native born or naturalized citizens. The dignity with which the children discuss this subject which comes so close to their mothers and gives these mothers a privilege equal to that enjoyed by the highest lady in the State, makes for democracy. In most cases the discussion of naturalization took place in the eighth grade class, but the visitor found one sixth grade in which every problem of naturalization that pertains to the children in the room had been satisfactorily solved.

At no time is technique valuable unless it is to be used. Nevertheless, we still find classes laboring to commit to memory the movements of forces in the Civil War, which ended nearly fifty years ago. It is needless to say that forces would never again be moved as they were in those momentous four years. The improvements and inventions of fifty years have changed the face of warfare, as well as the employments of peace. Incident and story, rather than technique make the events of that time real. The children who read about "Jo's Sacrifice" want to know more of the sufferings of the soldiers. Lincoln's clemency to the young soldier who slept at his post means more than the number killed and wounded in a battle. It does not speak well for the respect due

these fifty productive years to find the campaign maps and the minute detail of the movement of detachments of troops occupy the center of attention. An eighth grade teacher remarked to her class that during the fifteen years following the Civil War, federal legislation bore largely upon matters that pertained to the war, but that after that date there was a complete change. The restoration to the southern states of their right to regulate their internal affairs, the establishment of Civil Service, labor legislation, combinations of capital, the expansion of the country, sanitation, the movement into the far East, all carry a living interest.

One does not expect the children in the first six grades to present related history; but many of the classes in fifth and sixth grades are in possession of the essential facts in American History; the characters appear in the right place, engaged in the historically correct act. Proper organization would secure as much in any school. Failure to make use of the patriotic poems and lack of organization to insure a background for the connected work in eighth grade are the weaknesses of the lower grades. The failure to recognize the living events of the half century following the Civil War results in deadening the enthusiasm which many of the children bring from the lower grades. Initiative is not developed by consideration of the minute details of the battle field.

The schools fail to recognize the Chicago Flag. Some evidence of the existence of the city as a civic organization could be presented to the children.

HIGH SCHOOLS.

Ancient History, Medieval History, History of Modern Europe, English History, United States History.

Do the High School pupils approach the study of History with the advance in power which should reasonably be expected?

To what extent is the study one of isolated facts?

To what extent does it trace the development of the freedom of mankind?

To what extent does it make for good citizenship?

Are questions concerning such subjects as those listed below connected with the discussion of the history?

Industrial Development, Child Labor, Naturalization, Suffrage for Women, States Rights, Laws regarding the Holding of Land by Aliens.

To what extent do the pupils make use of Histories other than the required text?

Is collateral reading evident?

Are pictures and other illustrative material used?

Is the Public Library used for History material?

Are the pupils familiar with the work of the Historical Society?

Is the English of the recitation clear, dignified, connected?

The high schools were visited by sub-committees of two or three members who unite in testifying to a preparation of the teachers, which indicates deep study and broad reading.

The sub-committees differ radically in their reports of the power of the young people in approaching their history work. The visitors in six high schools commend the advance as fully equal to expectation; indeed, they unite in saying that it was a revelation to them to see the earnestness, the ability and the industry of the young men and women who make up our high school of to-day, our city and country of to-morrow.

Though there was no formal effort to trace the development of the freedom of mankind, the connection between past and present was made so plain that no child could fail to see the steps by which man has climbed to his present position. The same virtues and vices were discovered in the ancient Roman, the medieval Slav, the conservative Englishman, the modern American. No pupil who has passed through the experiences with these faithful, intelligent teachers can fail to become broader, better and more intelligent.

Evidence of collateral reading was shown in the recitation. Papers on special topics showed industrious research; intelligent assimilation of facts not in the text book was evident.

Where teachers and pupils expressed themselves clearly and concisely, it was a joy to listen to the well chosen sentences presented by modulated youthful voices; the quick, kindly correction followed the error in fact or form. In one high school, where "cradle English" has not entirely disappeared, careful pronunciation and correct English were demanded, with gratifying response.

In six other high schools, there was little evidence of collateral reading; in some cases, comparatively few members of the class had made the preparation of the lesson which the subject demands. Nor did the pupils approach the study of history with the advance in power which one would expect; they were interested in the recitation and appreciated the presentation made by the teacher, but did not impress the visitors as students.

The reports from the remaining nine high schools commended some classes and presented faults seen in others. The members of the committee are convinced that the differences arise in part from the elective position of history. Where young people of a single

year are working in a class, the results are markedly better than where the class includes people from the second, third and fourth years. Under the less favored condition, the less mature do not reach out and grasp the situation as well as the seniors do; the younger children are deterred from expressing themselves as fully as they would if they did not have the broader expression of the older children to measure up with. Classes in United States History seem to merit most of the criticism along these lines; the novelty or story interest does not exist, and the mixed classes do not encourage an organization of material suitable for the older people. The classes in industrial history meet with very general approval. The subject is practical and the facts are viewed from a new angle. It would seem possible to omit a review of United States History as a study of facts too greatly resembling the work of the eighth grade; the same time spent on industrial history would hold the attention and give opportunity for the use of the knowledge already acquired.

The study of history and civics contributes decidedly to good citizenship. In one school the young people were receiving very definite instruction in regard to the various elections which take place in Chicago. Their dates, the nomination of the candidates and other matters of practical politics were discussed fully and freely, without partisan bias. The officers for whom women may vote were distinguished from the constitutional officers and the resulting limitations of suffrage were well brought out. It is worthy of note that this work was done in a class composed entirely of seniors; the recitations were connected and dignified. This school is in possession of a good historical library; a teacher specializes in history and civics. She keeps in touch with the outside agencies, which give her information and training; the good results are evident.

In the majority of high schools the lack of pictures and other illustrative material is noticeable. Where such material exists it seems to be supplied by the teacher and it is highly appreciated. There is little use of the Public Library and no interest in the Historical Society. The teachers explained these conditions by stating that the young people are obliged to devote so much time to the other studies that they have but little left for history. The material presented is well related and in many cases connected definitely with the questions of the day. Immigration, industrial development, naturalization, child labor, suffrage for women, states rights, laws regarding the holding of land by aliens, the initiative and the referendum, the commission form of government for cities were discussed in different classes.

While but two cases of lack of preparation on the part of teachers were observed, the visitors noted a tendency to the college lecture system. The question and answer recitation has not been entirely eliminated. The committee unites in recommending that the topical recitation be more generally used. May it not be well for teachers generally to consider whether they are in the habit of stating the answer and demanding that the pupils merely pass an opinion upon the statement by saying yes or no? In a recitation on the life and times of Lincoln, the teacher gave much information concerning a certain speech, but did not produce the speech or direct the children to a book containing this speech. Cultivation of the student attitude would require some research necessary to first hand acquaintance with the document. In one of the highly commended high schools, impersonation is a favorite method of making the history work vivid. The students enter into the character, using literature, picture, song and story as accessories. Each prepares his own expression of what he conceives to be the person under stress. The value to the English is quite as great as that to the history. Some of the appeals, explanations and soliloquies were moving. In this work, the historical novels find their place; the charm of romance holds the attention of the young people and the literary style is to be preferred to that of any text-book. Some of the elementary schools contributing to this particular high school begin the impersonation work in the eighth grade; the elementary teachers are gratified to see the work extended and developed in the high school.

In but one class did the pupils seem to be availing themselves of the opportunity to use more than one text. The power to weigh and consider can be cultivated in no surer way than by the comparison of statements found in the various texts; moreover, this method of handling history gives the teacher the opportunity to eliminate the non-essentials. There is no subject which can be expected to lead more surely into an understanding of civic and national conditions. Comparatively few people read even the leading editorials which help to shape public opinion or reflect its course; may we not charge this lack in part to the habit of the history class of getting its information from one book, from the teacher or from a few devoted members of the class, rather than from the more stirring exercise of the faculties? People who read, mark, learn and inwardly digest the valuable material of history, possess an advantage not easily wrested from them. The public mind needs historical consciousness, breeding a spirit of patriotism out of which healthful social activities may grow, be-

getting a habit of recognizing institutions in the process of development rather than as static and final.

GERTRUDE E. ENGLISH, *Chairman.*

Elementary Schools.

EVELYN M. FAVOR,
Teacher, Beale School.
MARY B. LIVINGSTON,
Head Asst., Farren School.
EMMA B. LOWELL,
Teacher, Madison School.
E. L. C. MORSE,
Principal, Phil Sheridan
School.
ALBERTINE J. OLSON,
Head Asst., Sherman School.
LINA E. TROENDLE,
Principal, Agassiz School.
JAMES E. WELSH,
Principal, Garfield School.
JAROSLAV J. ZMRHAL,
Principal, Herzl School.

High Schools.

PHEBE A. HURLBUT,
Teacher, McPherson School.
ROBERT G. JEFFREY,
Principal, Sawyer Av. School.
JOHN A. JOHNSON,
Principal, Mark Sheridan
School.
ALICE T. KEARY,
Head Asst., Seward School.
DANIEL R. MARTIN,
Principal, Pullman School.
JAMES W. MCGINNIS,
Principal, Holmes School.
JOHN B. MCGINTY,
Principal, Parkman School.
AGNES MCILHON,
Head Asst., Ravenswood
School.
VISA MCCLAUGHLIN,
Principal, Sexton School.

EMMA B. MOTSCHMAN,
Head Asst., Schneider School.
ANNA F. MULLAY,
Principal, Sullivan School.
BELLE B. MURPHY,
Principal, Schiller School.
FLORA V. RENAUD,
Principal, Clay School.
SIMEON V. ROBBINS,
Principal, Hayes School.
HELEN R. RYAN,
Principal, Trumbull School.
INGER M. SCHJOLDAGER,
Principal, Adams School.
SARA M. WRIGHT,
Head Asst., Fulton School.

GERMAN.

Plan of the Inquiry.

The large number of schools offering German, and the small membership of the committee precluded visits to all classes in the subject. The committee was separated into two sub-committees, who visited twenty-two elementary and nine high schools. Schools were selected at random, except that care was taken that they be rather evenly distributed over the city and that children of different nationalities and diverse conditions of home life might be observed.

Elementary Schools.

Extent to Which German Is Offered.

German classes exist in approximately forty per cent of the elementary schools. By far the larger number of classes are in the North Side schools, a section where Germans and people of German descent live in considerably larger proportion than elsewhere in the city.

Proportion of Children Studying German.

No attempt was made to secure precise figures covering the extent to which the subject is studied. The rules of the Board of Education provide that classes in German are to be formed in a school when the parents of as many as fifty children, in writing request the subject; and the course of study provides for the subject in grades five, six, seven and eight as an elective under the conditions mentioned. Under the operation of these provisions practically all children, whose parents wish, are able to study German. In schools where no especial effort is made to direct attention to the subject, where it is regarded merely as any other subject in the curriculum, the proportion of children in the grammar grades found in German classes varies from one-third to two-thirds. One-half would perhaps be the general average of all elementary schools offering the subject.

Conditions Affecting the Formation of Elementary Classes in German.

It seems that the number of children electing German in any particular school depends very largely upon the attitude of

the principal, even in German communities. Under the rules for the formation of classes, in some large schools but few more than the number required are studying the subject; whereas in others practically all children eligible do so. Many principals do not favor German classes in their schools. In a few schools, however, so much enthusiasm for the subject is manifested on the part of principals or of teachers that there has been active propaganda in the community seeking to interest parents and pupils in the subject. Curiously all cases of this sort observed are in non-German communities and in schools with non-German principals. It appears in a general way, that wherever the principal enthusiastically favors the subject there is no difficulty in forming classes, except possibly in small schools.

The reason most frequently assigned by principals in making objection to the formation of German classes in their schools is that such special classes interfere seriously with an effective organization, unless the departmental plan is followed without deviation throughout the grammar grades. Such a complete departmental plan is followed in very few of our schools, and even where it is, a difficulty remains if any considerable number of children are excepted from the study of the special subject. In two schools where the complete departmental plan is followed, the principals have been able to work out an organization satisfactory to themselves. Most other principals interviewed stated that they had been unable to evolve plans which did not in some way seriously affect conditions at their schools. Under these circumstances it seems desirable that a special study be made of the situation with a view to finding a remedy. While not prepared to propose any plan looking to the attainment of this purpose, it may be pointed out that there was little complaint on this score under conditions at one time prevailing in the school system, when this subject was handled somewhat after the present manner of the special classes in manual and domestic arts.

A further reason frequently assigned in objection to German in the elementary schools is that many, if not most children in non-German communities at any rate, persuade their parents to make the necessary request; and that in such cases the child's interest springs out of the novelty of a new subject and an essentially different mode of presentation, frequently coupled with a supposition that the subject will be less difficult than others already studied. It was pointed out that in certain districts many of the children selecting German are retarded in one or more subjects—not infrequently in all subjects; and that where there is such retardation it almost invariably occurs in the English sub-

jects to an extent making it important that the children devote all possible time to the language of the land. This is particularly true in communities where a large proportion of the children attend parochial schools, especially when they are conducted wholly or in part in a language other than English.

It seems to the committee that in communities where such conditions prevail, and even where private and parochial schools do not generally hold the children for several years before they enter the public schools, but where nevertheless practically all the children live in homes where English is a strange language, there should be the greatest possible emphasis upon the English language. There should be provision allowing a certain latitude in such cases, so that principals might be permitted to take into consideration the needs of a community still in the "melting pot" stage as well as the imperfectly considered desires.

As might be expected, a larger proportion of children in the lower grammar grades study German than do so in the upper grades. It is also true that children beginning the study of the subject in the fifth grade usually prefer to continue it to the end of their elementary school life. The decrease occurs for the most part, therefore, by reason of children transferring from schools having German classes to those not having them. The places of such transferred children are often taken by other children from schools not teaching the subject. The result is that in the eighth grade the percentage of German pupils is noticeably smaller than in the lower grades. It has happened that classes in German have been begun a considerable time after the opening of a semester, with a resulting serious disturbance of the school organization for a considerable period. The proper time, from all considerations of efficiency, for the forming of classes in this, as well as other subjects, is when the school is organized for the semester. There have been instances also where classes in German have been opened, only to be closed the next semester or the next year because of insufficient requests for the subject. Obviously it is better under such circumstances that the classes should have remained unorganized in the first place.

Purpose Manifest in Teaching German.

In practically all elementary schools visited the manifest aim of the teacher, and of the school in presenting the subject, is conversational power. This, of course, involves the cultural motive. It may, and in the minds of the teachers, does look toward the utilitarian, that is, the acquisition of a language as a practical asset. The children themselves indicate that they regard the

language about equally important either as an accomplishment or as a practical aid in commercial life. Teachers appear in most cases not to have considered the motive as such, but practically all of them teach the subject conversationally and emphasize conversational power, and therefore are working toward a practical end. Incidentally, of course, culture results, as does all culture, as a by-product.

Teachers.

Teachers of German are found to be well prepared for their work, are enthusiastic, interesting and effective. Only rarely was one found careless in the use of language in her own speech. The sense of the committee is that German is taught as well as the best taught general subjects.

Methods of Teaching.

In the elementary schools there is little variation in the general method of presenting the language. All teachers make a practice of conducting the recitations in German. In some classes not a word of English is heard, although most usually there is allowed a limited amount of English speaking to make connection between the two languages. The learning a language by using it, rather than by studying about it from books, seems to be the rational way, and certainly it is proving effective. The acting of sentences suggested by questions or by the exhibition of subjects, the dramatization of little stories, the singing of action songs—all these expedients are very generally employed and are surprisingly effective in quickly giving the children a grasp and use of the language sufficient to understand what goes on in the recitation. A single semester appears usually sufficient for the acquisition of power to carry on a conversation of some range on subjects of immediate child interest.

The main effort in beginners' classes seems to be to get a vocabulary, mainly of nouns, verbs and adjectives, through illustrative activities. The best teachers use collections of articles, some of them in miniature or toy form, associated with the daily life of the children, and are well provided with pictures illustrative of child life. The fully equipped doll house is frequently in use. One of the most interesting and interested classes is that of a teacher especially gifted in drawing. She makes a practice of illustrating activities by blackboard sketches, to the delight of the children as well as to their rapid advancement. Occasionally in other classes children are encouraged to make illustrative sketches. Both those expedients are worth imitating.

Little attention is given in the lower grammar grades to the technical aspects of the language. The first end is power of understanding and expressing orally, in approximate accordance with usage, simple ideas suggested by child interests. Soon afterward the printed word is used to acquire ideas from the book. A little writing is sometimes done at this stage, although this form of expression receives but little attention until later, if at all. Nearly all teachers are careful to correct errors of usage as they occur, and some occasionally direct attention to the idiom or technical fact involved. This is a practice that all teachers in all subjects might well copy.

In the higher grammar grades there is increasing attention to the accepted language forms and usage, though with few exceptions the teachers continue to emphasize correct expression rather than acquisition of tabulated etymological forms or syntactical rules. The idea appears to be that the child should acquire incidentally such generalizations and established forms as may be especially helpful in expression. At any rate the elementary school child receives instruction in technical German grammar in harmless amounts.

At one school, where in the main the customary method is followed, there is a distinct effort to make the study of German cultural to a very unusual degree. As soon as the children have acquired a little facility in understanding the printed page and in expression, material of a distinctly literary flavor is used freely. By the time these children complete eighth grade they seem to be well on the way to an appreciation of what is good in German literature. They not only understand well what they read, and speak with some freedom on subjects of immediate interest, but are also, with some aid from teachers, to compose and act little dramas illustrative of German history and literature.

Dramatization is now recognized as an important help in expression. It should be pointed out, however, that to be effective the dramatization must provide that every child in a class shall take part in the representation. Otherwise there is little benefit to any except the small number who are likely to be selected for a given dramatization because of special interest or gift in that direction. Likewise it may be pointed out that concert recitations, occasionally found, while doubtless helpful in beginners' classes to a limited extent, are nevertheless discredited and belong to the educational scrap heap. The rote song singing, and study of the words of the songs preparatory to the singing, might well be about the extent of concert language work.

Writing the Language.

It has been mentioned that comparatively little attention is given to written expression in German in the elementary schools. A few classes were seen where the children could express themselves with freedom, ease, and beauty, in German script. In view of the rapid movement toward the use of the Roman letter, it may be questioned if it be desirable to give time to learning to write the German script. If, however, this is done, it is desirable that the same attention be given to the technics of writing as is expected to be given to written English. It seems that expression, whether in Roman or German script, may well be limited, as is now done, so that the emphasis may continue to be upon oral expression.

Problems of the Non-German Child Studying the Language.

All children, regardless of the language spoken at home, seem able to acquire facility sufficient to carry on little conversations in a surprisingly short time. A difficulty facing the non-German child is the mastering of the new language sounds, those not found in English or the other languages familiar to the public school child. This difficulty, however, does not seem very serious. A greater one is that of acquiring correct forms of expression. The same difficulty is met in teaching English and every other language, and apparently is no greater than that of average English speaking children in acquiring correct forms in that language when these are not habitually used at home and among their associates.

Results.

The criticism most frequently heard upon the teaching of modern languages is that, in the time allotted, a pupil cannot acquire a valuable speaking knowledge, which is the primary purpose of learning the language; and that unless he can acquire a facility of speech, the time would better be devoted to some study more developmental where there would be a definite and usable cultural product. It seems to the committee that where pupils have had the full four years of German they do acquire a satisfactory facility in speech and understanding, at least when conversing on subjects of immediate child interest. It does not seem that the elementary school needs to go beyond that with the average child. It is observed, however, that in many cases the fourth year children, even those who have no home or community atmosphere encouraging to the use of the language, have acquired

sufficient power to carry on intelligent conversations on subjects within their range, and even are able to think in German. When the child leaves school, if he comes into such an atmosphere, that is, if he is situated so as to be able to make considerable use of what German he has acquired in elementary school, he very soon becomes quite proficient in its use. It is then largely a matter of acquiring a larger vocabulary. Of course he is not founded in technical grammar, and easily falls into the vernacular, just as young people ordinarily do in speaking English.

In some elementary schools there is such a diminution of the number of children continuing in the upper grades and carrying through the study of German, that it seems doubtful if the resulting good overbalances the difficulties in organization and the time thus practically lost to pupils dropping out. Unless a child can continue the subject through at least three of the four years it would be better that he did not take up the subject at all, and that provision be made to limit, so far as such contingency can be foreseen, the choosing of the subject to children reasonably sure to complete the elementary course.

German in High Schools.

German is offered in all high schools. In the general and composite high schools approximately forty per cent of the pupils studying any modern language elect German, and this proportion remains nearly constant throughout the four years. Those who have studied German in elementary school are nearly always able to take advanced standing in the subject—usually second year, and occasionally beyond that even.

Aims and Methods.

In the high schools there was found some divergence in the aims in teaching German. For the most part the purpose appears to be, as in the elementary classes, ability to apprehend and use intelligently the spoken and written language, and incidentally culture, through the intellectual effort put forth in reading, conversation and technical study. In nearly all high school classes sufficient emphasis is being placed upon the technics of the language. In the technical schools the apparent primary aim is to give the pupil sufficient German to master technical books in that language. In accomplishing this result teachers seem to find it necessary to devote much time to technical grammar, and do not seriously consider conversational power. Inasmuch as but two per cent or thereabouts of the graduates of our technical high schools enter higher technical institutions or have occasion to make practical application of this sort of language training, it

would appear that some care should be observed in the formation of German classes in such schools, so that pupils may choose those classes having aims that most nearly suit their purposes.

It would seem that it might be possible to co-ordinate the teaching of German in the elementary schools and in the high schools in such a way as to present a continuous purpose, so that those pupils who begin German in elementary schools may continue the study in high school without a serious break. This can be accomplished in part, at any rate, by unifying to a greater degree than is done at present the purpose and methods in the high schools. The basis of this unification would be, in the opinion of the committee, the acquisition of conversational power.

Teachers.

Teachers in the high schools have, with few exceptions, a superior equipment for teaching the language. Many of them have studied in Germany in preparing themselves for their work, and not a few of them, from their youth, have been trained in German schools.

Results.

Some extraordinarily effective teaching was seen in high schools. Pupils completing the four-year course in the subject appear to have a reasonably satisfactory facility in the use of the language, and when placed where they can use the ability, very quickly become proficient in its use. In a considerable number of the advanced classes the pupils generally not only speak the language during recitation periods but also think in it. This would seem to be a certain measure of the effectiveness of the teaching. It also seems to the committee to be a power definitely to be developed and required of high school pupils.

MR. HENRY SUDER, *Chairman.*

OTTO M. BECKER,

Prin. Spencer School.

LOUISE K. HAGEN,

Teacher Bowen High School.

WILLIAM L. SMYSER,

Prin. Skinner School.

DOROTHEA VENT,

Teacher Physical Education.

ART CONSTRUCTION.

Elementary Schools.

A committee was appointed to survey Art, Construction Work, Household Arts, and Manual Training in the Elementary Schools. The committee consisted of a district superintendent as chairman, a professional artist, a member of the Normal College faculty, four teachers, and five principals. In all, sixty-eight schools were visited. The basis for judging the efficiency of the work in any school was derived from a study of (1) the instructions sent out by the departments, and of the course of study, (2) the teachers' statements of their aims, (3) the favorableness of the neighborhood for such work, (4) the possibilities shown in the actual work of the children, (5) the previous personal experiences of the members of the committee.

Art.

A Course of Study in Art should tend toward the accomplishment of the following ends, all of which come legitimately into the field of elementary education:

1. *Individual Discipline*: Eye training, hand-training, method in thinking, observing and expressing ideas in visual terms, the mastery of fundamental technique.

2. *Immediate Service in the School*: The use of Art in other studies for the purpose of clarifying and enriching them.

3. *Culture*: An appreciative acquaintance with a number of typical great works of Art.

4. *Social Discipline*: The cultivation of ideals in regard to home and community environment.

The ends enumerated above your committee finds accomplished in varying degrees; some by the school system itself, and others by agencies entirely separate from the school so far as official connection goes.

1. Individual Discipline.

The technical side of the Art course finds greater stress (exactly as it should) in the upper grades, where there is more object drawing involving definite observation and expression. The expressional aspect is beautifully accomplished in the work of the first, second and third grades in most of the schools visited. Draw-

ing, paper-tearing, paper-cutting and clay-modeling give freedom for such expression, and at the same time the beauty in the result which the children should learn to expect. It is believed that the distinction between technical or disciplinary work and expressional or illustrative work should be made sharper; and that technical drawing should be taught more sequentially.

Design should be a part of every activity in the school where orderly arrangement is involved. Design (not necessarily decoration nor yet illustration) is fundamental to right arrangement of English composition, mathematics papers and themes.

2. Immediate Service.

Art education today, as an expressional subject, labors under the necessity of creating its own content or subject matter, whereas, it should find much of this subject matter with its attendant interest already created. History, geography and nature study of the grades require the processes of visualizing and representing which drawing affords. In twenty schools only one case of co-operation between art and these other subjects was found, although inquiry was diligently made for it in all schools. The course of study recently adopted provides, in its arrangement of alternating semesters, an excellent opportunity for the alteration of technical advance work and illustrative work in the elucidation of other subjects.

There is a gratifying tendency to correlate Art with construction, manual training and household arts. This tendency results in considerable economy of time; in giving the children a knowledge of what is right and beautiful in design; and in a reduction of emphasis on decoration and an increase of emphasis on constructive designing. On the side of construction, manual training and household arts, such a correlation must result in the establishment of the principle that every project made should spring from a conception which is esthetic in its spirit, and this is the great life-giving principle which underlies all intelligent handwork. A study of the art and household arts courses shows that during the past four or five years numerous changes have been made looking to a closer relation between this and the other departments mentioned. How close at hand the opportunity for correlation sometimes is may be seen from the two instances given below, which are typical of many.

Instance A:

Children produce certain designs in the art class. They learn certain fancy or decorative stitches in the sewing class. The de-

sign and the stitches are not suited to each other, so that one or the other must be discarded in producing the finished product.

Instance B:

In one school, where the children of first, second and third grades were making free hand paper cuttings of animals, children of the fifth grade were sawing out toy animals in thin wood from formal patterns which had been provided.

The difficulty is that each of the courses under discussion is planned separately. If the Industrial and Household Art courses and the related part of the Art course were planned as one, correlation could be made more fundamental.

3. Culture.

Familiarity with classic works of art is fostered through illustrations in the Art Course Drawing Books. It is further aided by the Public School Art Society and the organizations through which it works by the contributions of friends of the several schools and formerly by gifts from graduating classes. All these agencies provide permanent or circulating collections of pictures. The Art Institute is ready to assist the schools wherever opportunity exists. The Public Art Society has inaugurated the extremely practical as well as scientific experiment of furnishing an entire room in a school, of redecorating the walls and of providing furniture. Parent-teacher Associations have performed similar services.

4. Social Discipline.

Buildings and premises are frequently beautified through the directed efforts of the school children. The many-colored paper cuttings of the lower grade children brighten the walls of rooms and corridors. Plants both within and without the buildings create an atmosphere which many a child will demand again when he goes from the school.

Art in the Chicago schools as taught today appears to be worth all the time that is given to it. If this report shows points where improvement is immediately possible, it is because the earnestness of purpose shown by the teachers has invited thought along lines which lead to the greater excellence which their work already promises.

It is recommended:

1. That clay be provided in every grade.
2. That a construction paper having more body than the engine paper now used for tearing and cutting, take the place of the engine paper.

3. That the lead pencil be restored to a position of more prominence in seventh and eighth grades.

4. That art centers be maintained in schools where current exhibitions of children's work may be kept on view—one center for each 5 or 6 schools.

Construction Work in the First Five Grades.

In considering the question of construction work as affecting individual discipline, the points examined were:

The training of the child in accuracy, the development of initiative and originality, the correlation of construction with other subjects, the interest and pride of the pupil in his work.

Training in accuracy was found in all grades; in first grade, in paper folding and tearing; in second grade, in making paper furniture and boxes; in third grade, in making raffia mats and in weaving raffia bags; in fourth grade, in the construction of reed baskets, and in fifth grade, in sewing and in scroll sawing. In such work exact dimensions must be measured; eye and hand are trained together.

Construction work offers a splendid opportunity for the development of initiative and originality. As an example of original work, in school C, paper and wood furniture of various sizes was designed and constructed by the pupils. In school E there were good results in clay modeling which were accomplished without dictation or supervision. Several models represented games and occupations. To one group of children in School B the making of baskets suggested the construction of lamp shades.

The possibilities in the correlation of construction work with other subjects were found to be numerous and important. When the pupils are keenly interested in the construction of an article, motivation is afforded for lessons in English and in other academic subjects. In several classes the children followed written directions for the construction of objects, and in other classes a description of the work was written and read by the pupils.

The Course of Study in each grade deals with the natural interests of the children. This factor, together with the motor activity which the work affords, lends to create great earnestness and enjoyment among the pupils. They also show pride in the finished article.

It was found, however, that certain conditions prevailing in the schools were detrimental to the fullest growth of the child from the point of view of his individual and social discipline. For example, in school F the teacher was in charge of as many as forty-eight boys doing scroll sawing. To insure accuracy of work it was

necessary for the teacher to examine every piece of work at every stage. Owing, however, to the large number of pupils in the class, it was impossible for her to do this. This condition of large classes is one of the greatest hindrances to the best work in all grades and in all subjects.

It is recommended that a construction room, equipped with benches, chairs and various sized stools and containing cases and lockers in which to store tools and materials be provided in every school.

Household Arts.

Cooking.

The following instances serve to indicate some of the things attempted in the cooking classes:

School A has an airy and spacious kitchen on the top floor. Here a teacher was presenting to a class of girls an experiment in the properties and action of yeast germs. This was preparatory to the actual process of bread making which was scheduled for the next lesson. The demonstration and its results were recorded in note books.

SCHOOL B: Here one was impressed with the close connection secured between household arts and the academic work. For example, such mathematical operations as were required in reducing and expanding recipes were further emphasized in the class rooms. This correlation was reached through the sympathetic attitude of the principal and teachers.

SCHOOL C: A sixth grade was having a lesson on the chemical properties of baking powder and bicarbonate of soda.

SCHOOL D: The girls were making corn meal muffins, working from a recipe written on a blackboard by one of the class. The materials were put together, the batter beaten and the mixture poured into pans without any dictation from the teacher.

The cooking department aims to keep in touch with the following academic subjects.

(a) Mathematics:

(1) By reducing and expanding recipes; (2) by making expense accounts.

(b) Geography:

(1) By locating sources of supplies; (2) by taking note of effects of climate on production of food stuffs.

Much attention is given to the esthetic and economic side of housekeeping. Instruction includes correct serving of meals and the proper arrangement of dining tables with pleasing and simple

decorations. It is gratifying to note that the girls are applying knowledge gained at school to the management of the home. In some cases they manage more economically than do the mothers. A desire for more sanitary conditions in the care of food is cultivated. Emphasis was placed on putting the room in order at the close of a lesson. This task seems to be eagerly sought, and it is desirable that all pupils be given opportunity to practice this phase of housekeeping.

Sewing.

Sewing, as indicated by the course of study, aims at a larger conception of the subject than mere skill with the needle. To reach this aim the co-operation of art and household arts is required; and while there is evidence that these two departments do occasionally co-operate, it appears that this condition has been brought about, where it exists, more by the enterprise of individuals than by the persistent demand of all the instructors for a time saving plan of working out the interdependence of the subjects.

The work in sewing is made to connect with the various classroom subjects:

1. Arithmetic—measuring and estimating cost of material.
2. History and geography—the study of costumes of various times and countries.

The study of the effects of climate on the production of materials.

Co-operation has been secured between the sewing and cooking departments to some extent. The girls make caps, aprons and sleeve protectors in the sewing class for use in the kitchen.

Group work is popular and deservedly so. Freedom is engendered and a kindly interest taken by each in the work of all.)

In many cases eighth grade girls are encouraged to wear inexpensive and simple costumes for closing exercises and for other occasions. Curtains have been made and stenciled for the classrooms and linen marked with the school initial by eighth grade girls.

The committee makes the following suggestions looking toward the improvement of the work:

1. More schools should have dining rooms in which to make practical the lessons in correct serving.
2. Refrigerators should be more generally supplied.
3. Laundry utensils are needed for lessons in the proper washing and ironing of linen.

4. Arrangements should be made by which the girls may have more frequent practice in purchasing and preparing meals within a given price.

Machine sewing should be introduced only after marked efficiency in handwork is secured.

5. Additions should be made to the school library in the form of good current fashion magazines.

6. A separate sewing room should be provided for each school. This should be large, tastefully decorated and have comfortable chairs, low tables and every modern equipment.

Manual Training in Sixth, Seventh and Eighth Grades.

The tendency at the present time is to increase the number of manual training teachers in the employ of the Board of Education so that each teacher may spend a longer period in a school and so that large schools may secure the entire time of an instructor in manual training. This is rapidly solving the problem of bringing the manual training into vital relation with the school. The interest in a particular school which is aroused in the teacher by the fact of his working in it continuously is likely to bring about a natural sensible correlation of manual training with other subjects.

It is pleasing to note that in nearly all the schools visited, this condition of co-operation between the shop and the remainder of the school does exist. There were evidences of the correlation of manual training with the work in arithmetic, in geography, in spelling and in nature study. Boys were seen making out bills for the stock used in the construction of articles under way; they were heard discussing the different kinds of lumber, and where each was obtained. In one school the pupils were constructing window boxes for use in the school, and in another shop each boy was making a frame to be used in the book binding work of other classes. When the problem is selected, there are in the different shops various methods of procedure. It would seem, however, that the continuity of interest depends upon the manner in which the pupil is led to the completion of the work. Where woodwork is preceded by accurate working drawings, made permanent in the form of blue prints, the pupil not only increases the probability of success but he touches industrial life at more points. If, in the manual training shop, the boy develops the ability to design the article he desires to make, he not only adds materially to the satisfaction to be derived from handwork, but he acquires much in the way of good taste and the sense of proper proportions.

The really good mechanical drawing done by the pupils is sel-

dom seen, though such work is entirely within the comprehension of pupils who work in the shops. Not enough emphasis is placed upon the designing of articles which pupils desire or need, and not enough time is given to the mechanical drawing. The Course of Study suggests a list of articles to be made in the shops and the construction of these objects, in too many cases, seems to complete the end in view. By leaving out design, there is lost the possibility of valuable art training; and by the neglect of the mechanical drawing there is lost the possibility of a very useful industrial training as well as a splendid correlation with arithmetic.

In some shops visited, it was found that the mechanical drawing in each case preceded the woodwork, and in other shops work in design was noticed. In many cases, however, the article to be made was represented by a sketch on the blackboard, showing the dimensions. This method is too likely to result in inaccuracies.

Group work is done in many shops, and it has its advantages in that the product is generally devoted to the use of the school, and serves to develop interest in the school.

The question naturally arises, in observing the work of the Manual Training Department, as to whether it is well to have wood work throughout the whole city as the form of manual training for all of the higher grades, rather than a variety of kinds of hand work dependent upon the tendencies of the pupils in the community in which the school is located.

The manual training shops are, on the whole, well equipped, the tools are kept in good condition, the pupils are eager and well behaved, and the instructors show great interest in the work they are doing and in its connection with the other work of the school.

Aside from the decided lack of mechanical drawing and design, there is not enough variety in the articles constructed and not enough freedom given the pupil in selection, although the Course of Study allows of a great range. There is also a failure to realize the possibilities of art in manual training.

High Schools.

The committee chosen to survey Art, Woodwork and Household Arts in the academic high schools submits the following report and recommendations:

The committee included one district superintendent, one principal, one technical high school art teacher, six eighth grade teachers, a county dietitian, and a special teacher of art in the elementary schools.

Divided into groups of three, the committee visited all of the

academic high schools and saw a large number of the classes in Art, Household Arts and Woodwork conducted by the teachers in those branches. By this means information was collected as to each department, both as to its internal workings and as to its co-operative efforts.

Art in the High Schools.

The Art Section of the high school teachers several years ago prepared syllabi for the work in design and representation, type-written copies of which were sent out as suggested outlines. These included plans of work for the four-year Normal Preparatory course and four-year General Course, two years required and two elective; and a four-year Arts Course. A text book compiled by a committee of Mechanical Drawing teachers has been authorized by the Board of Education, and is now in use.

It is assumed in this report that the term "Art" covers the work of both freehand and mechanical drawing classes. Although the technique of the two branches differs, the underlying artistic intention on the part of the teacher should be the same; that is, to make the pupil's power to draw a means of expression rather than an aim in itself.

The class work was generally of a distinctly departmental character, showing little co-operation with other departments. It was largely form study, composition and design in line, mass and color, and technical exercises in mechanical drawing, skill in the handling of the media being often mistaken for the goal instead of a means to an end.

Some excellent applied design was seen, while much design remained good only in the abstract for want of an opportunity to apply it. In one school figure-study was given as a basis for costume design. The application of this was not seen. In another the work in mechanical drawing was conducted in a manner similar to that of the drafting room of a large machine shop. From this school some boys have entered directly into positions as draftsmen. Still another school showed work done by the students in designing and making electrical apparatus for use in the science classes. One class designed a blast furnace and made from wood a working model.

Noticeably strong work was being done in those schools where there were unusual opportunities for co-operation between departments. There the art teacher finds in Household Arts and Manual Training fields rich in resources for the expression of art activities. The teacher of Manual Arts recognizes the added educational value of a plan worked out in the art class before its

completion in the shop or work room, and finds that the student's conception of a project is enriched by approaching it from both the art and constructive points of view.

The relation between the work in Manual Training and Mechanical Drawing being more apparent than that between art and other subjects, there is more general co-operation between teachers of the former.

In some places there were first, third and fourth-year classes together in the same room, including pupils from the General, Household Arts and Normal Preparatory Courses. This is often due to the planning of programs without much consideration for art. It is generally left to any available time (after the academic program is settled) with no regard to the character of work of the classes in which the student is placed. His time is often divided between classes of other years than his own.

There is great variation in the quantity and quality of equipment, some schools having a most generous and adequate supply, others an insufficient one in the way of seatings, light, shadow-boxes, still life, pictures, draperies and books, which necessitates the teachers working under great difficulty. In two schools teachers are required to carry shadow-boxes and studies from room to room and install them in places that are unfit for work as regards light and seats. In some studios the seats and easels were stationary; in others movable ones were provided, giving to the pupil an opportunity for a change in point of view.

Some schools have four-room apartments, for which the students from the Art, Household Arts and Manual Training classes work out projects. The solutions of Art problems pertaining to heating and lighting apparatus are impossible on account of the lack of this apparatus and of ceilings and windows admitting outside light.

The ideal studio should contain more than correct architectural design, therefore the following suggestion is made:

• That in each studio, in addition to proper light, seats and lockers, there be provided a library of books on Art, costumes, house plans, furniture and other correlated subjects; a collection of pictures and prints; and one of lantern slides.

Household Arts.

The equipment for instruction in the main is good—often excellent—but there are still some kitchens situated upon the ground floor, so that open windows are impossible because of the dust and dirt. The sewing rooms are in general well equipped, but some

of them are poorly lighted. The seating is sometimes so arranged that the best use is not made of the light available.

In several schools there are four-room apartments, in the furnishing of which both the Household Arts and Household Science students take part. The dining room is used for luncheons often prepared at a specified price in order to teach economy in marketing as well as skill in preparation and attractiveness in serving.

That some of the opportunities for social service are not overlooked was shown in one class, where the girls had combined in groups to make outfits to be given at Christmas time to needy children.

The material side of the household is included under food, clothing and shelter. The last has received less attention in the schools than the first two. The study of the house, so far as it involves house planning was with one exception confined to the boys and carried out in their mechanical drawing. These house plans might have been studied by the girls with regard to convenience of arrangement and proper sanitation.

In some of the schools the classes were made up of pupils from different years so that first and fourth year students were sometimes working on the same problem. Class instruction was also hampered by the fact that students who had had training in the grades were in beginning classes with those coming from private or other schools who had had no previous work. The advance on grammar school work was not sufficiently marked.

There were great contrasts in the various schools in regard to the co-operation of different departments. Some schools were remarkable for the excellent relation between art and sewing. On the other hand, in some instances, girls in the drawing class were making good costume designs, but had no opportunity to carry them out in the sewing room. In other cases the work in sewing was done without help from the art teacher. Sometimes the difficulty in relating the work lay in the lack of classification of students. The girls who had elected Household Arts were frequently not in the Arts or Science classes.

Good and original work in dressmaking and millinery was seen in several schools; and in some, particularly where this was related to the art, the result was shown in the dress of the students, though often such instruction seemed to have no practical effect. In some cases girls were kept at long pieces of embroidery and at scalloping and crocheting after the technique had been acquired. In two schools there was no machine work, and in one case this lack was justified by the teacher on the ground that hand

work was better. This would seem to leave out of account the teaching of economy of time and effort. The selection of materials was emphasized in some cases. Samples of several varieties of cloth were studied in relation to their color, texture and adaptability to dress.

The following recommendations are made:

Equipment.

Kitchens should be so situated that they will have better light and freedom from dust and dirt. Screens should be provided in every kitchen.

When there is no laundry equipment there should be ironing utensils and a small set tub in connection with the school kitchen, for laundering napkins, towels and aprons. Laundry work should be taught in connection with the sewing and textile work to show the treatment of different fibers and colors, and the time taken to launder articles made in different ways.

The equipment should include fashion books and art books. There should also be provided "forms" adapted to the immature girl. Samples of textiles, draperies and woods should be available.

Course of Study.

The Course of Study should be intelligently interpreted and followed. Its recommendations need not be enlarged upon.

High School Manual Training.

In academic high schools the equipments of the woodworking shops are surprisingly generous. The pupil may learn the uses and care of the ordinary tools such as saws, planes, chisels, etc.; and in the better equipped places, i. e., in the newer schools, he may become familiar with power saws, planers, lathes, etc., without being put to any expense himself. He is not required to pay for material, except when he undertakes to construct something for his personal or family use.

The manual training courses in the academic high schools cover two years only. The classes in the wood shops work in double periods, but are in general somewhat mixed; that is, both first and second year pupils are often working at the same time, so that individual rather than class instruction is the rule. It is, indeed possible that this feature, that of mixed classes, may not be a defect; perhaps it is a virtue, if the classes are not too large. When the instruction is individual the more skillful pupils have greater opportunities of going ahead as fast as they are able, instead of loafing while others catch up.

There is too much variation in methods, and in the interpretations of the course of study by the teachers. They may have their classes do many or few drill exercises in joinery; do some group work or none; require original designing of projects by pupils or permit them to copy. Some teachers carry on the work independently; others endeavor to secure the co-operation of the Art Department in the plans, drawings and construction of the pupils' projects. There is one point on which the manual training teachers agree. They believe the pupils should feel sufficient pressure in the direction of technique to make them produce workmanlike results.

The more prominent good results are: First, the boys make skillfully the things undertaken; second, they have a fairly wide experience with tools; third, they have first hand knowledge of the necessity of a definitely drawn plan or design of the thing projected before the making of it begins.

Other results sometimes achieved are: A, experience in co-operation and self-sacrifice in making something of value to the community as a whole; B, a feeling for beauty and some idea of how to obtain it as well as utility and sound construction.

The following recommendations are made which apply only to Manual Training:

Useful articles embodying elementary principles of construction should be made as early as the first semester.

Sketch drawings of proposed projects when approved as to construction by the manual training teacher be made into working drawings under the direction of the mechanical drawing teacher; and that if the pupil is a member of the mechanical drawing class he shall receive credit for such work.

The following three suggestions apply equally to the departments of Art, Household Arts and Manual Training:

The high school teachers of Art, Household Arts and Manual Training should inform themselves as to the work done in their respective subjects in elementary schools; and they should make the high school work a continuation of, rather than an abrupt change from that of the elementary schools. Teachers of the Household Arts and the Manual Training departments should confer regularly with the art teachers. Each class in art, household arts and manual training should gain some experience in community work by doing, as a class, something for the school.

Elementary Schools.

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CLYDE A. BROWN,

Principal, Jones School.

KARL A. BUEHR,
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GEORGE W. EGGERS,
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LETITIA S. GREENE,
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WALTER R. HATFIELD,
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WILLIAM HEDGES,
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LUELLA V. LITTLE,
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ELLEN SCHMIDT,
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HELEN F. VAN LIEW,
Teacher, McCormick School.

High Schools.

L. L. BAILEY,
Special Teacher, Art Dept.
FRANCES M. CHURCH,
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LILLIAN M. COMPHER,
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FLORA C. DUNNING,
Teacher, Pulaski School.
MARIE L. MANN,
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ELIZABETH S. MORRISON,
Teacher Vanderpoel School.
ALICE P. NORTON,
County Dietician.
KATHERINE A. PADDEN,
Teacher, 62nd Place School.
KATHERINE RIORDAN,
Principal, Keeler Ave. School.
ERMINA H. RUTHENBERG,
Teacher, Blaine School.

INDUSTRIAL AND PREVOCATIONAL.

The following schools are at present organized on the "Industrial" plan:

Bryant Burr, Copernicus, Foster, Franklin, Gladstone, Haines Practice, Hendricks, Holden, Jackson, Jenner, Jungman, McCosh, Smyth, Von Humboldt, Walsh.

Schools with "Prevocational Courses:" Lane Technical High, Crane Technical High, Flower Technical High, Lake High.

As a preliminary step, the Committee found it necessary to agree upon a point of view from which to evaluate this work. After full discussion, the following statement of principle was agreed upon:

1. The Committee holds that the primary or fundamental purpose in elementary education is the development in the child of those attitudes and reactions essential to social well-being in a democratic society.

2. The different hand-works are hence in the elementary schools, as in fact all content, primarily to further the end of good citizenship or social culture, and only secondarily for vocational purposes. It is granted that all elementary school content has a vocational aspect. In this sense all work in the elementary school is prevocational.

Criticism. The Committee looks therefore with disfavor on over-emphasizing the vocational aspect of hand-work in the elementary schools for pupils under fourteen years of age and the subordination to this aspect of the academic content taught.

Method of Teaching and Efficiency of Instruction in the "Industrial" and "Prevocational" Classes.

The Committee attempted to judge this aspect of the work from the following view points, obtained by analyzing the general culture aim into three subordinate aims:

- a. Aim of adaptive, thinking, inventive citizenship.
- b. Aim of practical, executive, skilled citizenship.
- c. Aim of an artistically and socially appreciative citizenship.

Criticism. The Committee is fully conscious that the teachers in the work are handicapped by lack of equipment and room and by the fact that the work is in a sense new.

Recommendation. It is the opinion of the Committee that the

adaptive and appreciative aims are the most important in the elementary instruction and should be consciously emphasized, though it is granted that a few preliminary lessons emphasizing the skill aim are advisable in early stages and in all hand-work.

Terminology.

The Committee criticises as misleading and ill advised, the use of the terms "industrial," "vocational" and "prevocational" in connection with courses now offered under these designations.

Recommendations. All schools of the elementary group should be ultimately of one type except as hereinafter suggested. However, during the readjustment of the amount of hand-work carried on in the various schools it may be advisable to use some term to distinguish schools and courses of the older academic type from schools of the newer type of organization.

"Type A" is suggested (and used herein) for the newer modern type of elementary school and "Type B" for the older, more academic type of school. The term "vocational" is reserved for the type of school hereinafter recommended.

Differentiation of Schools, Courses and Pupils.

The Chicago elementary schools may be divided into three groups. Type A ("Industrial Schools"), Type B (the older elementary type) and "Prevocational" schools.

Among the "Type A" schools there are two distinct groups:—

a. Those in which the cultural aim predominates. b. Those in which the vocational aim is consciously emphasized. In one school there are two types of courses corresponding to the A and B Types, above mentioned. (There is varying emphasis of the prevocational aim among the "Prevocational" schools.)

Except in the "Prevocational" schools there has been little differentiation of courses to meet the needs of pupils and it is expected all pupils will take the same course through the eight grades. When a choice is made between an academic and an "industrial" course such a choice is generally based on age of pupil and choice of parents.

Except in one "prevocational" center the Committee was unable to find any distinctively vocational work, that is, work looking directly and with choice toward a vocation.

Nowhere is there attempt to prepare either boys or girls to enter trades directly except in one where pupils under fourteen even, are taught a specific trade.

Recommendation. (1) The Committee is unanimous in the

recommendation that the Type A organization be extended as rapidly as possible to all elementary schools. This will involve,

(a). A greater variety of hand-work.

(b). A revision of the present course of study, consolidating the two courses therein contained with a minimum and maximum time that may be devoted to hand-work.

(c). The employment of at least two teachers of hand-work in every school.

(d). The modification of the present plan of building so as to provide adequate and convenient room for carrying on the different types of hand-works.

Comparative Cost of Type A and Type B Schools. The largest items to be considered in the running expenses are teachers' salaries and shop supplies. The greatest variation in expense is due to the difference in the number of pupils assigned to teachers in the various schools, for, of course, the smaller the classes, the larger the per capita cost. Estimating on the basis of 28 pupils to a teacher in Type A classes, and 35 pupils to a teacher in the regular 7th and 8th grades, we find that the cost for all the running expenses in the Type A school is approximately 25 per cent greater than in the regular school.

2. Pupils. It is recommended that pupils be differentiated, electively in not to exceed twenty per cent of their work in grades seven and eight; that the basis for differentiation be the individual ability of the pupil as determined by teacher and parent; and that the object of the differentiation be to develop individual ability, to awaken interest, and to assist the pupil in choosing his life work.

3. Sexes. There is at present a differentiation between boys and girls. In the prevocational schools, the girls are sent to one school and the boys to others. In the Type A schools, there is a separation in all manual work, and generally in physical training; and, sometimes, in science and drawing.

Recommendation: It is recommended (a) that in the 6th grade in Type A schools, both sexes be permitted to take the same hand-work. (b) That in 7th and 8th grades of Type A and in vocational schools boys and girls be separated in hand-work but housed in the same buildings.

4. Courses. It is recommended that a sufficient variety of courses be provided in Type A schools so that pupils may be given thereby an opportunity to try out prevocational work, or possibly to choose a vocation. Work should be given typical of academic commercial occupations.

5. Vocational Schools. It is further recommended that centers or schools be instituted to take the place in the system of the "prevocational" classes in the High Schools and to meet the demand for a vocational type of education for boys and girls, fourteen years of age or over, in the seventh and eighth grades of the elementary schools;

Such schools or centers to be called Vocational Schools and to include all types of vocations in their curricula. They should be equipped therefore as technical industrial or trade schools. To such a school would be sent:

a. Pupils now sent from the various elementary schools to the "prevocational" schools.

b. Pupils between fourteen and sixteen who are not at work or at school under the present system.

c. Pupils in grades seven or eight of a regular elementary school over fourteen years of age who desire to receive trade or technical training in addition to their regular elementary school work (part time).

d. Youths between fourteen and eighteen who are at work (part time).

e. Persons over eighteen who may desire to pursue the work (whole or part time).

Such schools would be in session until eight o'clock, as well as Saturday morning.

Industrial Course as Related to Efficiency in Academic Work.

In Type A schools, the academic subjects are to a certain extent correlated with shop-work. Much time is given to geographic and informational reading. Pupils also study literature, but get less of this work than those in academic classes. Penmanship is taught in all these schools. There is a limited correlation of the arithmetic with the shop-work. In English composition, industrial topics furnish a part of the subject matter, and the shop and academic teachers co-operate. Industrial history and geography are correlated with shop-work in a few schools. In science, the work is carried on either in science laboratories (of which there are but two), in the shop, or in the classroom. Two or three periods of thirty minutes each are given to music and physical education weekly.

CRITICISM—In those cases where the largest time allotment is made, there is a considerable diminution in the time remaining for English and other academic subjects. This is less detrimental than it seems, however, for the reason that in most of

the schools shop time is taken for discussion, drawing, informational reading, and in some cases, composition, bearing on the subjects and problems in hand. This constitutes a virtual extension of academic work into shop time. Furthermore, it is the universal experience that concrete work so conducted reacts in a stimulating and vitalizing way on the academic subjects. The work being more intensive, results can be obtained with less effort and in shorter time.

RECOMMENDATIONS—EMPHASIS ON FORMAL WORK. With the introduction of a greater variety of activities in the schools, the older argument against formal or drill work on things fundamental no longer has force. There are certain facts of academic form and content that every child should know absolutely. They should be drilled into him. A minimum of this necessary skill and content should be exacted of every grade in every school. There should be no falling away from a certain definite standardized academic efficiency.

The Program for Type A Schools.

There is great variety in programs of different Type A schools. Some are conducted on the "half-day plan", giving one-half day, or the major part of it, to the hand-work courses, and the remaining time to academic work. In others the "one-third day plan" is in operation, the forenoon being taken as two 1½ hour periods, and the afternoon as one such period, with an extra period of 30 minutes for related work. In the "quarter-day plan" the hand-work is confined to a period of 75 to 90 minutes each day. Each of these plans of work is variously modified in the different schools to suit neighborhood conditions, or plan of operation.

CRITICISM—There is a limit beyond which it is unsafe to reduce the time devoted to academic subjects, due to the fact that in each there is necessity for definite drill. A certain amount of repetition is needed in making habitual the fundamental forms of the academic subjects, and care should be taken that adequate time is afforded for the drill necessary to fix these habits. Liberal time is even more necessary for the growth of the child in appreciation of music, of art, and above all, of literature.

RECOMMENDATION—A satisfactory division of time seems to be that in which the fundamental academic subjects receive at least one-half of the time, and the courses which are in a real sense activities, such as music, physical education, art, and hand-work, receive the time remaining.

Length of Periods.

In the majority of the Type A schools the length of the period is from 70 to 120 minutes, but a few make use of the full maximum half-day, so that the pupil is engaged in hand-work for three consecutive hours. The teachers in these schools favor this longer period on the ground that their classes accomplish much more than they could in the shorter periods. Other schools divide the long period so that an alteration is secured, and the pupils have a period of hand-work in each school session.

CRITICISM—The three-hour period is too long for any form of hand-work which is at all confining, such as sewing, and even in work which permits some freedom of motion and change of posture there is danger of fatigue detrimental alike to shop and academic work. The use of so long a period should be restricted to those special projects, such as baking, which requires this amount of time, and should be occasional only, and not regular.

RECOMMENDATION—It is recommended that there should be no period in the regular work longer than 90 minutes.

A succession of academic subjects which requires prolonged physical inaction is equally undesirable. The opportunity afforded by the industrial courses to secure relief from fatigue by alternation and variety should be taken advantage of.

Course of Study.

The course of study now in operation in the Type A schools is securing valuable and significant results which point in the direction in which development is desirable and possible. Many lines of work are being entered upon, which owing to the newness of the work and lack of adequate equipment gave only a promise of the results which may be anticipated when the conditions are more favorable.

CRITICISM—On the whole, more variety in the hand-work courses is needed. The child should be given a wide experience of types of industrial, agricultural and commercial work, so that he has the opportunity of finding himself, and will naturally gravitate toward those fields of effort in which his bent and ability will find fullest scope. It is felt that it is a mistake to give three years of woodwork, often mostly furniture, to the boys, or as much sewing to the girls.

RECOMMENDATION—A division of the school year into ten-week periods would make it possible to introduce such a diversity into the hand-work as would greatly increase its usefulness. One or more such periods could be given to intensive

work on each selected line. To administer such a variety of work without dissipating the child's energy will require a close correlation of the courses with each other and with the academic subjects in the light of a clear conception of the educational value of each activity. The cultural function of elementary education should be clearly recognized, and the academic elements should in no case be subordinated to the industrial.

TYPES—The kinds of industrial work selected should be types in the sense of being representative of groups of industries. They should be fertile in industrial possibilities, but must imperatively be fertile in cultural possibilities. The object in view should be, first, the immediate development of the child, and afterward, the enlargement of his experience to the point where his choice of a vocation is a real choice and not an accident.

RELATION TO TRADES—Any course which takes it for granted that a child is at an early age destined to enter a particular trade, and which aims to give him training in the technique of that trade is narrowing and dwarfing, and has no place in the elementary schools.

LOCAL OCCUPATIONS—The industrial courses should aim at emancipation from the lock-step which forces the child of one district into the factory, another into the office, and another into the professions. The courses in any given district should make intelligent use of local occupations as points of departure, but should set the child free from the coercion of his immediate environment and make him in as large a degree as possible master of his own future.

VARIETY—The need for greater variety in the course is particularly insistent in the case of girls. It is unfair both culturally and vocationally to limit a girl's hand-work during three years to cooking and sewing, even with the extension of cooking into the related work in science, and of sewing into weaving and art needlework. These subjects while containing valuable possibilities of culture, are more frankly economic than any other of the "industrial courses," and should be supplemented by the addition of a number of suitable activities which will enlarge the girl's experience and broaden her outlook on her possibilities.

PREVOCATIONAL MOTIVE—The course should take account of the child's right to some training in the types of occupational activities, agricultural and commercial as well as industrial.

COMMERCIAL COURSES—The commercial side of the industrial processes carried on, filing and indexing, expense and personal account keeping, the transaction of business with a bank, and similar

elementary business, processes afforded opportunities for widening the child's experience, and for opening the commercial world vocationally to those fitted for it by taste or talent.

AGRICULTURAL COURSES—Elementary agricultural training might include study of soils, germination, practical gardening, etc. Some of the schools have already made a most excellent beginning in this direction.

SCIENCE—There should be a science course properly correlated with the various activities. The good work now being done in some of the schools should be extended and systematized to include the science of the industrial processes engaged in as well as of the geography work.

Types of Handwork.

The boys are given courses in mechanical drawing, pattern-making, metal work, wood-work, printing, etc. The girls have sewing, weaving, cooking, millinery, laundry and general home-making, the cooking including simple training in the chemistry of foods. Both girls and boys are taught designing, pottery, book-binding, glove-making (in one school) and gardening.

CRITICISM—The number of courses given in any school has been limited by the lack of proper equipment, the crowded conditions of the rooms, and the amount of yard space or vacant property available. The work has been handicapped by the lack of material, pupils in many cases being required to purchase it, since no appropriation had been made by the Board of Education to cover the expense.

RECOMMENDATION—The following types or units of handwork are recommended.

1. **THE WOODWORK UNIT**—This serves as a center for carpentry, mechanical drawing, related science and geography, and mathematics.

2. **THE HOUSEHOLD ARTS UNIT**, including (a) Cooking with its related science, geography and mathematics; as well as accounts, laundry and dining room service. (b) Serving with its related science, mathematics, geography and art; living room and bed room service, cane and rope weaving, and millinery.

3. **THE ART UNIT**—This includes art-crafts, basketry, pottery, copper and brass, leather work, together with pictorial and object drawing, and design.

4. **THE PRINTING UNIT**, including printing and book binding, with correlated English work.

5. THE COMMERCIAL UNIT—This includes accounts, simple bookkeeping and typewriting, penmanship and related arithmetic.

6. THE AGRICULTURAL UNIT, including flower and vegetable gardening, simple forestry, germination of seeds, etc.

MANUAL OF EACH HANDWORK—To prevent dissipation of energy there should be courses of study worked out in each of the hand-work subjects. Some definiteness of aim and practice would thus be secured, more especially if suitable text-books were arranged for each of the subjects in the Type A courses.

Accommodations.

ROOM—No elementary school has as yet been planned and equipped as a Type A school. In all schools in which the "industrial" course has been adopted, use has been made of unused classrooms, recitation rooms or libraries and rooms fitted for the purpose in basements.

Notwithstanding the fact that principals have made the best use possible of all available space, many of these rooms are ill-lighted, ill-ventilated and inadequate.

RECOMMENDATIONS—In the construction of new buildings and in the remodeling of old ones, we suggest that the following rooms be planned, viz.:

UNIT 1—A wood shop connected with which there should be a store room, a small recitation room, a room equipped for mechanical drawing and one for elementary science.

UNIT 2.—A printing room with a room in connection for book-binding.

UNIT 3.—An art room large enough for a variety of occupations other than the regular art work, such as basketry, metal work, etc. A separate room is suggested for pottery and in addition there should be, on each side of the city, a kiln with competent workman in charge to fire pottery for the various schools.

UNIT 4. A sewing room; with a small living room and a bedroom adjoining.

UNIT 5. A kitchen; with a dining room, a laundry, a science room, and a small class room.

UNIT 6—Commercial room. An ordinary class room fitted up as a commercial room.

UNIT 7—A room for agriculture. The fitting of the room would necessitate storm-windows and separate heating facilities, either steam, gas or electricity, the latter preferred.

UNIT 8—Assembly Study Hall. To carry out with the greatest flexibility and economy the work which such a plan contemplates an assembly hall for study for the three highest grades would be advisable.

Supplies.

CRITICISM—The delivery of supplies has been irregular but the service has been improved and the assurance given that this irregularity will be remedied.

There is a considerable waste in materials and in the time of teachers and pupils.

This is due in great part to the limited variety of supplies which obliges the teacher to plan what can be made from material available rather than what best fits the needs of the pupils; to the lack of proper equipment; and to the necessity of sharpening and repairing tools without equipment.

RECOMMENDATION—The following suggestions are made for the reduction of waste, viz.:

1. For the wood-shop.

a. There should be a general tool repair shop.

b. Each shop should contain a power grind stone and a band-saw to cut lumber in the rough.

c. There should be enough variety in the sizes of lumber available to make possible any problem suited to the needs of a class.

d. Each shop should have a scrap box and it should be the aim as far as possible to make use of the unavoidable scraps.

2. For the sewing-room.

The teacher should be given a certain amount of money per capita to be spent for the particular materials needed.

3. For the print shop.

The following material should be kept in stock at the Supply Department

a. Standard sizes of type.

b. Printer's ink.

c. Various kinds of print paper.

Teachers.

1. **SELECTION AND PREPARATION**—Since the opening of the "prevocational" schools, the work has been hampered by the scarcity of teachers who have qualified for the shopwork. Selec-

tion has been limited by the necessity of securing teachers with the requisite technical training.

Of twenty-seven shop teachers questioned, practically all have taken technical courses in other than the work they are at present teaching. Ten of them had additional experience in commercial shops and sixteen are graduates of Normal schools.

CRITICISMS—The teachers, though dealing with new problems and handicapped for want of room, equipment and material, have met the situation effectively.

The selection of these teachers should be based on a general culture that will guarantee that the pupil shall feel the influence of an inspiring personality, a technical training in several crafts, with an intensive knowledge of one or two, and an adequate pedagogic training. To this should be added a training in design and applied art, so that the forms and decorations of the articles made under his direction may be artistic and pleasing. Consequently all students preparing for this work should be given general training in the Normal School, and special training required for this work. In addition, extension classes, round tables presided over by heads of departments, and outlines and other printed material prepared under their direction are suggested.

2. Number of Classes and Length of Periods.

Each shop-teacher is at present responsible for an average of five classes, with approximately twenty-five pupils in each. The average class period is ninety minutes.

Though she has twice as much work to look over and prepare for, the academic teacher in the Type A school is responsible for twice as many pupils as the teacher in the Type B school, and does not have a free period when the pupils are at manual training and cooking.

Recommendations.

It is recommended that ninety minutes be the maximum length of the shop period; and that some arrangement be made whereby the academic teachers in the Type A schools be allowed periods each week in which to prepare and examine work.

Posture of Pupils.

The committee considers the posture of pupils in shop work to be of the utmost importance. The health and physical develop-

ment of pupils is paramount to every other consideration, for without physical development education has no foundation upon which to build.

CRITICISM—In this respect, the committee found much to criticise adversely. The wrong posture, however, was largely due to the nondescript character of the equipment. In many instances tables and desks were too high or too low. In the woodshops no attempt to accommodate the benches to the age and height of the boys was apparent. In the printing rooms the posture was far from satisfactory. In many cases the boys were allowed to sit at their work. The composing tables were too high or too low.

In many cases the posture assumed by girls at their sewing was bad. The tables were too high or low and the girls could not put their feet underneath them because of some obstruction.

RECOMMENDATIONS—(1) It is recommended that all desks, benches, tables and chairs be standardized for each grade or age, or that they be built on adjustable models; (2) that as far as possible handwork be done standing. No hand work exercise in the elementary school should be continued to the fatigue point for the standing position. Boys should not be allowed to sit in the print shop or at mechanical drawing. Much of the work in the sewing room could be done standing. The posture of the tailor and shoemaker is traditional and does not necessarily grow out of the demands of the work. There is much tradition likewise in the seamstress's position.

EQUIPMENT—The sewing room should be provided with tables of varying heights and without drawer or shelf beneath the top. Chairs also should be suited to the size of the pupils. There should be at least two cutting tables, 6 feet long and 3 feet wide, one 30 inches high, the other 34 inches high. A suggested minimum equipment is: 1 14-year dress form, 1 16-year dress form, 1 36-inch bust woman's form, 3 skirt standards for bust forms, 1 2-burner gas stove, 1 set of irons (Mrs. Potts), 2 ironing boards on standards, 1 large mirror unmounted, 6 sewing machines, 2 skirt markers, 24 scissors—medium size, 6 button hole scissors, 1 case for displaying work and samples, 2 cases with shelves and drawers for material, 3 pairs large shears, 2 lavatories.

The laundry room should have child's size tubs and washboards, ironing boards and irons, gas stove, electric or gas irons, and dryer.

The dining room should be equipped as is the average in a wage earner's home.

The printing room should have type stands fitted to the standing position of children. A suggested minimum equipment is: 24 type cases, two-thirds size; 2 presses, one 8 x 12, one 6 x 9; 1 large paper cutter; 1 compositor's table, 38 inches high, about 8 ft. long, and 40 inches wide; 1 proof press; 1 planer and mallet; 3 dozen quoins with key; 1 non-explosive benzine can; 1 set labor-saving leads, 1-em, 2-m, 3-m, etc.; 24 composing sticks; 100 lbs. 18-point type; 100 lbs. 12-point type; 100 lbs. 10-point type.

The basketry room should have metal pails for dyes.

The metal work room should have benches at which children can stand. A suggested minimum equipment is: 10 jeweler's saws; 3 hand drills; 12 files, assorted; 8 vises; 3 planishing hammers; 3 bloccks for beating; 1 blowpipe and bellows; 3 metal shears; 1 shears with curved blade; 2 lignum vitae hammers; 2 rawhide hammers; 1 bar silver solder; 1 bar soft solder; 2 soldering irons; 10 lbs. sheet copper; 10 lbs. sheet brass; 5 lbs. sheet aluminum.

The manual training room should have, in addition to what is now provided: 1 hand saw to be used by teacher only; 1 power grindstone or carborundum stone; no other power machines of any kind.

The physics laboratory should be equipped for teaching such elementary facts in physics as come in the work of the skilled mechanic.

The mechanical drawing room should have individual adjustable benches. Suggested minimum equipment: 12 mechanical drawing sets; 12 T squares; 12 try squares; compasses, rulers, drawing pencils 3H or 4H; tracing, blue-print and drawing paper.

"Prevocational" Courses in High Schools.

Statistics.

From inception in September, 1912, to date.

	Crane.	Flower.	Lane.	Lake.	Totals.
Admitted	243	233	467	224	1167
Left other than by graduation..	85	94	178	56	413
Graduated	72	37	85	90	284
Membership	86	102	204	78	470
Entered High School	41	17	31	25	114
Still in High School	33	12	23	17	83

AGES—From 12-13, 1; 13-14, 3; 14-15, 98; 15-16, 190; 16-17, 118; 17-18, 31; 19-20, 7.

RETARDATION OF PUPILS—11 pupils were retarded one semester; 70 two, 118 three, 109 four, 68 five, 33 six, 6 seven, and 15 eight semesters.

CAUSES OF RETARDATION—Illness, 137; lack of interest in academic subjects 96, moving 53, trouble 4, absence 11, mentality 59, traveling 7 foreign 15, late start 15, temperamental reasons 36.

AMBITIONS OF PUPILS—54 different occupations were asked for by pupils in these courses, Electrical Engineering and Civil Engineering being the favorites.

That the Board of Education, in instituting these classes for retarded children, is meeting a genuine demand is clearly shown by an analysis of the reasons given by the pupils themselves for electing to go to these schools. Such reasons are: (1) a desire for more shop work; (2) to learn a trade; (3) an opportunity to make up in the high school time lost in the grades from various causes given in the accompanying tables—such as lack of interest in academic subjects, moving, illness; (4) A feeling of greater self respect in mingling with companions of one's own age and size.

The accompanying tables show to some extent the success of the schools in meeting these demands.

(1) They have reduced but not eliminated the waste incident to the years 14-16; (2) they have held in school those with a definite vocational purpose; (3) they have created a new channel to the high schools for the self-reliant, adventurous boy who, feeling the economic pressure at home, has struck out for himself but, finding himself at a disadvantage in his bout with the world, seeks an opportunity to increase his power.

CRITICISM—(1) These classes, successful as they have been, still lose too many pupils of the so-called "wasted years." This would seem to indicate that the work as now administered is not sufficiently prevocational or vocational; that the range of skills and industrial interests is not yet sufficiently great, being too closely confined to wood and iron, with some printing. The tables show 54 out of 300 to 400 gainful occupations in the United States selected by these pupils. The courses need to be still more liberal and more related to science, the basis of all industry.

RECOMMENDATION—It is recommended that these classes form the starting points of the genuinely vocational schools as hereinbefore recommended for both boys and girls over fourteen years of

age in grades seven and eight of Type A schools or from all elementary schools.

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COMMERCIAL EDUCATION IN HIGH SCHOOLS.

The committee appointed to make a survey of the work done in the commercial department of our high schools respectfully submits the following report:

By direction of the chairman, the committee had in mind:

1. What percentage of the pupils take up the commercial course with the idea of entering upon a business career?
2. What percentage enter upon it because of the general training which the subjects afford?
3. What percentage, if any, adopt the course because they think it an easy way to earn credits?
4. What percentage of the pupils are able to use the touch system in typewriting at the end of the course?
5. How much attention is given to spelling, punctuation, capitalization and English construction?
6. What points, in the teacher's estimation, should be emphasized in the course in stenography?
7. How much attention is given to penmanship in the work in bookkeeping?
8. What general training does the course afford which will be of practical value for pupils who do not enter upon a business life?

In this report will be found more or less definite answers to the queries cited above.

Bookkeeping.

Whenever there is buying and selling, a record or history of the transactions must be kept. A systematic, intelligible record showing debits and credits is indispensable in any business. The prodigious expansion of output from farm and workshop, the varied and complex organizations for production and distribution, together with the extension of credit have raised bookkeeping to the dignity of a profession.

That a knowledge of it opens the door of opportunity to vast numbers of young people from year to year, is the experience of all who have interested themselves in obtaining positions for them, and is confirmed by "the want ad" columns of our daily papers.

Bookkeeping, in common with the other commercial subjects, is attracting both teachers and pupils of a higher order and in greater numbers, from year to year. In the older courses in the high school, one often meets with pupils who when questioned for the reasons for electing any particular course, are unable to do so, simply repeating in substance an erstwhile popular song, "We're here because we're here." Aimlessness is not common in the commercial department. The committee was surprised to find the unanimity of the teachers' estimates as to the percentage electing bookkeeping (a) with the hope of becoming professional bookkeepers, (b) as an easy means of earning credits, or (c) as a subject of general culture. According to their estimates, ninety per cent of the pupils electing this subject do so with the hope of becoming bookkeepers, five to eight per cent elect it because they believe it will aid them in making an entrance into the business world, and the remainder, that it will enable them to keep in closer touch with future ventures on their own account. None could be found who had selected the course in hope of an easy way of earning credits.

No teacher, no business man, needs to be told what an inspiring experience it is to be surrounded by a group of young people all doing work which they elect themselves for a definite purpose and by means of which they hope to gain a livelihood or to gratify still loftier ambitions in this practical commercial age. A fixity of purpose, it seems, permeates the whole student body of the commercial department and it makes no difference whether bookkeeping or stenography is elected as the major.

Many of the teachers have had practical experience in business offices and all of them are specially trained in the subject they are teaching. They are experts in their line and attack their work accordingly. Actual business experience in accounting are made the basis of the instruction. The exercises are worked over by the pupil until the principles of bookkeeping and the rules of its practice are thoroughly comprehended and assimilated. In the course of this preliminary work, the inter-relation of the several "books" is established.

Beginning with simple retail projects, using only the day book or journal, cash book and ledger, they advance, step by step, to the more complex exercises introducing as they proceed all the many columned "books," principal and auxiliary, in accordance with the latest usage in up to date offices. Business forms from leases and way bills on through the whole round are explained, written out and made the subjects of entries as

they are used in actual business experience. This is the ideal which the department has set before itself as a guiding principle. In most of the classes it is lived up to.

By the end of the first year, the pupil has mastered the theory of bookkeeping, knows how to handle simple, original entry books, can post all entries to secondary books, and handle the ordinary accessory records. In the opinion of many of the teachers, a bright pupil can then take charge of a set of books in an ordinary retail business.

By the end of the second year, quoting several successful teachers:

"They are not accountants, but they are good practical bookkeepers." "They can handle corporation books and are able to do independent bookkeeping. They have some training in banking." "Our pupils can take charge of a set of books." "They have had training in wholesale as well as retail business."

The instructors, without exception, disclaim all pretention to classifying their two year pupils as accountants. They all assert that greater maturity of mind and more training than it is possible to give them in two years' time at their age is needed to qualify them to assume this title. In its proper professional sense, accounting calls for discrimination and judgment developed and ripened by observation and experience beyond the reach of two year high school pupils. For educational values, bookkeeping must be credited with disciplinary possibilities of a high order. It demands accuracy in classification, recording and computation, neatness in execution and order in its practice. Errors may not be erased and can not long be hidden. It is the opinion of the committee that the work in bookkeeping in our high schools is a credit to the school system. The critical attitude of the teachers toward their own work is a sign of progress.

Since business offices now generally are supplied with computing machines, it is the opinion of the committee that the commercial department of each school ought to be provided with at least one adding or computing machine, and that the pupils in bookkeeping ought to learn how to use it. Often one of the first duties a graduate is asked to perform is to operate some such machine and it is disconcerting to be unable to fulfill the first requirement.

The committee also begs leave to make the further recommendation that better provision be made for the teaching of penmanship. It is true that it is not a cultural study, but commercial subjects are chosen, not primarily for their culture, but

for their practical bread-winning value. Commercial work is vocational, and it must meet the demands of employers or it fails. There is a vast difference in the estimation put upon penmanship by the employers of our pupils and that put upon it by some teachers. Both employer and teacher may disregard the opinions, each of the other in this matter; for the employer may continue to employ only those whose writing is up to his standard, and the commercial department is an established fact. But to the youth seeking a position, this insistence on the one hand and disregard on the other may become a matter of serious import.

Stenography and Typewriting.

A very high degree of efficiency is attained in the subjects of stenography and typewriting. The percentage of pupils taking those subjects varies with the locality. In those schools where the pupils are mainly preparing for college, ten per cent are enumerated in Commercial Courses, while in those schools whose pupils expect to get more quickly into business, as many as thirty-five per cent are found in such classes.

The quality of teaching is universally excellent. At the end of the first year, pupils are able to take slow dictation and to transcribe accurately. Many pupils through necessity leave at the end of the first year, and are able to do work sufficiently well to fill positions acceptably where the correspondence is limited and not difficult. The committee dictated letters to second year pupils which they took down in shorthand at the rate of eighty words per minute. Some of these letters were technical, yet the pupils transcribed them accurately and made letters which were correct in form, spelling and punctuation.

Graduates of the two year courses have no difficulty in obtaining positions. All of them are taking the work with the idea of using it, either in business or in taking lectures. None of them take up the work as an easy way in which to earn credits.

The equipment in some schools is not good, but is being rapidly improved. The work would be more efficient if provisions were made to reorganize classes every six or eight weeks, permitting those who are doing well to go on, and turning back the slower ones to review and pick up lost ends.

In typewriting, the touch system is the only one taught. Pupils have no difficulty in using their machines without turning their eyes away from the notes. A variety of typewriters are

used, covering all of the kinds commonly found in business houses.

Teachers and pupils alike are to be commended for their serious and business-like attitude toward these subjects and for the efficiency attained by the pupils at the end of the course. /

Business English.

Your committee found, among the teachers, a practical unanimity of opinion namely, that pupils who attain a knowledge of Business English or an ability to use English effectively for the purpose of transacting business, do it through the study of English literature and the practice of English Composition. Apart from the form of an ordinary business letter there is, so far as the committee could discover, no teaching of Business English that differs from any other English. Having spent some time considering whether or not there should be such a well defined course, your committee has concluded that there is just one way in which it might be instituted.

Granted that every business engaged in today has a vocabulary and a method of procedure more or less peculiar to itself, some of which might be grasped by the pupil still in school, and be to his advantage, the way to start him along that line is to induce him to do laboratory, or research, or survey work in as many industries as his time and circumstances will permit.

Before he can write in terms of any industry or business, he must think and speak intelligently in those terms. In order to do that he must have some acquaintance with the business. In our opinion the nature or size of the business does not matter. If we could first of all persuade our young people that they, each day, perform many simple acts that are in the nature of business and that can be regarded and analyzed as to their success or otherwise, and the causes that produced the success or the lack of it, we have already attained one point,—a more sympathetic attitude toward the work in English.

Your committee recommends that more of the time in English be given to *oral* expression; to the reproduction of matter read; to oral discussion of topics given; to debates; to correction of sentences lacking in clearness; to the arrangement of sentences as to sequence,—all with a view to the gaining of power in maintaining a proposition in the face of opposing arguments.

Spelling.

All the schools are giving particular attention to spelling. Sets of words are studied by writing them in columns, by using

them in sentences, and in letters and business forms. A proof of the effectiveness of this work is shown in the fact that in the many transcripts examined by your committee, it was rare to find a misspelled word.

Penmanship.

The penmanship of pupils entering high school has improved greatly from year to year since the introduction of the muscular system of writing, so that now in the upper grades illegible penmanship is the exception rather than the rule. The finger movement is natural to little children, but, when the muscular system has once been thoroughly mastered, it is persisted in whether supervised or not.

The Commercial Course as it now stands calls for instruction in penmanship for all students taking it, whether Bookkeeping or Stenography is their major. This has produced very fair results, as credit is refused until the penmanship is at least fair.

Legibility, the first and most important requisite in penmanship, was evident everywhere. Considering the fact that so little time is allotted to supervised penmanship and that in most of the work the writing itself is entirely subservient to the subject matter, we feel that its importance should be emphasized by all teachers.

Business Arithmetic.

Business arithmetic is largely computation. It does not involve any new or abstruse learning. It requires accuracy and rapidity. It might very safely be classified under exercises in the four fundamental operations in integers, common and decimal fractions, percentage involving discount and interest, and more or less extensive work in mensuration. Your committee found that in practically every school much time was given to drill in some or all of these subjects. While it is manifestly impossible to give specific instruction in all of the details encountered in the business world, nevertheless an attempt is being made to teach particularly those subjects which are used universally in business offices.

It is the opinion of the committee that those teachers who are giving daily oral and written drills for quick and accurate results, together with problems requiring an exercise of the reasoning power, in the topics enumerated, are about as near

to the practical teaching of this subject as it is possible to approach it.

In Conclusion.

The chairman sent the following questions to about a hundred of the business firms of the City, selected somewhat at random:

1. Have you had or have you now in your employ in the clerical department of your House any graduates of the commercial department of our high schools?

2. If so, have they proved reasonably adaptable to your needs?

3. Have you found them well grounded in the principles and practices of the business world?

4. Did they bring habits of promptness and neatness to their work?

5. If stenographers, was their knowledge of spelling, punctuation, capitalization, and diction dependable?

6. Have they evidenced ability to meet emergencies?

About half of those to whom the letters were sent responded; and those who had had our young people in their employ, with a single exception, expressed entire satisfaction with their work.

On one of the sheets, after answering "yes" to all the queries, the manager wrote in the margin: "Immeasurably superior to any other employes of the same age and experience." But one who declared that he has not had any of these in his employ volunteered the following judgment: "The public school product cannot spell,—figure easy bills or write a decent letter—from a business point of view their education is wasted—we have to take them and train them ourselves—Your Methods Must be Wrong." Your committee is not informed as to how this judgment was reached.

The following letter is in great contrast to the above in the attitude of the business man towards the graduates of our commercial department:

"On the enclosed blank, I have endeavored to answer questions relative to your pupils to the best of my ability. It has been our good fortune to employ a very large number from the public schools within the last two years. On the whole, they are entirely satisfactory. Commercial departments have shown a marked improvement during the last eighteen months. Your graduates now seem better prepared and better fitted for their

work than any from the private business colleges. You are at liberty to use our name in connection with the questionnaire, if you see fit.

Yours truly,

SEARS, ROEBUCK & Co."

The following from a firm doing a large business, who have not had any of the graduates of the high schools in their employ, is decidedly interesting:

"In response to your letter of inquiry of March 13th, seeking information concerning the graduates of the Commercial Department of the high schools, I wish to advise that we have none of these young people in our office at the present time. About the early part of February, someone from the Board of Education called us on the telephone, directing our attention to the class graduating in February and asking if we would be interested in placing any of the graduates. We stated, then, that our office force was complete, but that we would be very glad to receive applications for any possible vacancies. The writer personally interviewed a number of the applicants and was very favorably impressed with their knowledge of clerical and office requirements; and if we have any openings in the near future, they will be given first consideration."

These responses answer affirmatively the question as to whether our graduates in stenography are able to take dictation at a reasonable rate of speed, to spell correctly, and to punctuate according to established usage. Transcripts of work dictated by the chairman to the senior class in all of the high schools are on file in his office, 830 Tribune Building, for the inspection of any one sufficiently interested to inquire.

Some of the responses reveal the natural dislike of business men to change. One manager wrote: "We have never had young men from the commercial department of our high schools. We prefer young men from business college." To be sure, were that preference universal, there would be no opportunity for our young people to prove their efficiency. But that it is not universal, is shown in the fact that our graduates are placed as soon as they are free from school,—many being under engagement weeks before their graduation. The demand is outrunning the supply. This ought to tell whether the graduates are doing satisfactory work. Many of the schools have kept track of all their graduates in the commercial department and can show any one who desires it the career of each pupil since his graduation. It would be a revelation to some who deny the ability of

our schools to fit for the business world, to look over their records and verify their truth.

HENRY C. COX, *Chairman.*

MARY G. COSTELLO,
Teacher Ericsson School.

IDA L. M. FURSMAN,
Head Asst. Linne School.

MARY G. GUTHRIE,
Prin. Knickerbocker School.

WM. R. HORNBAKER,
Prin. Smyth School.

ABIGAIL M. HUNT,
Prin. Kenwood School.

AGNES W. O'BRIEN,
Head Asst. Willard School.

W. D. SMYSER,
Prin. Brentano School.

ELIZABETH G. SULLIVAN,
Teacher Cooper School.

SARAH C. THOMAS,
Teacher Beidler School.

VERONICA WHELAN,
Teacher Tennyson School.

VOCATIONAL WORK IN HIGH SCHOOLS.

The committee appointed to make a survey of the vocational work in the high schools has visited and carefully inspected the shops and drawing rooms in the nineteen schools where vocational work is carried on. In this inspection three phases of the work have been noted; a general view, covering discipline, interest and the nature of the work done; the pupil with regard to his development of power and initiative and the motives which influence him; the teacher, with regard to personality, care of implements and material, and the results accomplished in handling classes and individuals.

The members of the committee were impressed and pleased with the splendid discipline that prevails. A fine spirit is generally noticeable, based upon interest in the work and loyalty to the school. We found the equipment as a rule ample, often lavish; the necessary material at hand in abundance, and well prepared plans and methods in general use. Pupils are preparing for *professional* courses in higher institutions; some for work in the trades or *industries*; some for *usefulness* to themselves and others; some take the work for its *cultural* value.

In three technical high schools, the 3112 pupils are all in vocational courses. About 45 per cent of the young men are planning for higher professional training; practically all the rest will enter the trades, largely in office and administrative positions. Of the girls, one third have in mind professional training, about one third enter the trades and about one third help at home after leaving school.

In sixteen academic high schools, 4,045 pupils out of a membership of 17,007 are in vocational courses. An estimate by pupils and teachers is as follows:

Influenced by the professional	Wood.	Iron.	Elec.	Sew'g.	Cook'g.
motive	369	258	97	165	152
Influenced by the industrial					
motive	295	41	88	53	7
Influenced by the utilitarian					
motive	253	38	72	1045	535
Influenced by the cultural					
motive	176	105	17	137	132
Totals	1093	452	274	1400	826

The teachers impressed us, in the main, as a body of strong, capable men and women, greatly interested in their work and their pupils, giving generously of their time and their best efforts and training the boys and girls to think independently and quickly. Some of them have the additional faculty of inspiring their pupils with the joy of service and a pride in the work that lifts it above mechanical drudgery.)

Woodshops.

The work of the first ten weeks is called joinery and the art of making a good joint is the final test of the pupil's ability. Furniture making comes next and all boys enjoy intensely this part of the work. They are all allowed to take home the finished product upon paying for the wood. Many a home has an excellent Morris chair, piano bench, or other article that represents a money expenditure of a dollar or two only, but many thoughtful hours of labor on the part of the young man of the family. Wood turning and elementary pattern making, with lectures on matters pertaining thereto, follow and in the second year advanced pattern making is taken up, the pupil actually making the patterns used in the foundry by himself.

We have found this work going on in all the schools according to their equipment and consider it excellent throughout the whole system, though varying considerably in scope.

An effort to acquaint the boys with commercial shop methods is made in some of the schools. In one shop the group system of foremen and workers is being tried out. There are several groups and a healthy spirit of competition exists among them. Products are turned out in large number and commercial standards of technique are maintained. Care of material and tools, and a neat condition of the shops is required and this is an important item in the education of the boys as future industrial workers. Pupils gave various reasons for taking the work; some will become carpenters, cabinetmakers, etc.; some desire the training to enter higher technical schools. Teachers are generally good, practical men.

Iron Work.

In the foundry, boys are taught to prepare the sand, make the molds and pour the melted brass, aluminum, or iron. Habits of mental and physical alertness are developed. At the time for pouring the boys worked as steadily as men and seemed ready for all emergencies. To correlate the work of different years and kinds, boys here make ornaments to mount on wood-work made

the year before, or make castings to be finished later in the machine shop or to be used in the electric shop. Ventilation in many foundries and forges is poor. Gases are not carried off well.

The articles made on the anvil are useful and the boys gain technical knowledge as well as skill in their production. After making hasps, chains and the like, they are allowed to make more pretentious articles, such as andirons, garbage burners, and bent iron articles. Each boy pays for the material used, and the articles belong to him.

In the machine shop boys first learn the mechanism of the machine, the method of running it, and the dangers to be avoided. At first all work on the same simple task, but later each is allowed to undertake a special problem. Articles made are gasoline engines, repairs for machines, etc. The boys work steadily on when a teacher is occupied with visitors. In some of the schools the equipment is not complete and the classes are small. At one the boys seemed to be doing the work because it was required. Few could tell what vocation they would follow or why they were taking the technical course.

Much greater enthusiasm is found in the technical schools where all pupils are taking the vocational course. Projects are more ambitious, as lathes, engines for automobiles and motor boats, vacuum cleaners, scale beams and parts of machines in use. Correlation between the various shops and the drawing department is complete. Drawings and blue-prints for the advanced problems are carefully made, patterns for the various parts are constructed in the pattern shop; from these, castings are made which are dressed and otherwise prepared in the machine shop where other needed parts are made and the whole assembled and tested. The forge and machine shop develop individual capacity and self reliance, whereas the work in the foundry develops team work and community spirit. All these activities develop self control, quickness of perception, judgment, manual skill and some artistic appreciation. Professional and industrial motives prevail here. Instructors are practical men, many of them enthusiastic in their lines.

Electrical Work.

Work in the electrical shop is carried on at seven of the high schools, but in the two technical high schools the equipment is so superior as to put them in a class by themselves. At one school the recitation was a lecture; pupils showed intelligence and initiative when put at laboratory work, but the class was too large and there were more lookers-on than workers. At another, the shop

has not been fully equipped; with some pupils the interest was intense, with others only fair. At another, the pupils are helping to install some of the new equipment under direction of the teacher. At another, two basement rooms are in use; pupils receive practical instruction in wiring for bells, lights, etc., and in handling and testing motors. At another, the shop is small, though fairly well equipped; the interest seems to be waning and it was felt that the expense was out of proportion to results. It is our opinion that really good results in electrical shop work can only be secured in schools where there are well equipped machine shops.

At the technical high schools the shops have been in operation for several years, so that considerable advanced work, as well as beginning work, is being done. At one school pupils were at work on motors, all the parts being constructed by them and the motors assembled and put to work. They showed growth and power and required very little help from the teacher. Systematic care and neatness were noticeable. All tools and material are in the care of pupils appointed for that purpose, who pass them out on request and receive them and check up at the end of the period. All articles made are for use in the school or in the homes. The instructors are experienced and practical men. At another technical school the equipment is ample and the correlation of the work with that of the wood shop, foundry and machine shop, is excellent. Pupils were engaged in making and testing all sorts of meters, resistance boxes and the like. Several had made and set up good working motors, not only knowing how to make the articles, but understanding their working and economic use. All pupils were interested and alert; note books were kept very well, showing accuracy in spelling and English and neatness in drawings and in general style. In every exercise there was a definite purpose and genuine interest and pride in the work. Tools and materials are cared for by pupils as described above. The instructors are very capable and handle the work in a masterly way. Pupils in this department of the technical schools are preparing for higher technical training, leading to professional positions, or for securing employment in the various electrical trades.

Sewing.

Classes conducted by eighteen teachers were visited and of these a single one was considered only fair. On the whole, the work is of a practical nature, including the making of general household articles and personal wearing apparel. At the technical high school for girls, sheets, pillow slips, night gowns, and other articles are made for the Parental School and articles for the school lunch

room, as towels, aprons, caps, and dish cloths. In most of the high schools some practical training is given in textiles to enable pupils to distinguish texture and value of materials, and they are required to compute the cost of all articles made. Many of the schools have classes in millinery, in which pupils make hats for themselves. We saw many of these and found them remarkably good in style and appearance and made at surprisingly small cost. In some of the schools, work is done in pattern drafting to develop confidence in using and modifying purchased patterns, and in designing and making original ones.

The work in sewing and millinery in the high schools necessarily develops technique. We believe that it also develops in the pupils the power of concentration, industry, and economy and establishes aesthetic standards. Work rooms are everywhere neatly kept and implements and materials well cared for; in only one the lack of sewing machines was noted. The great majority of the girls are taking these courses for the practical personal benefits to be gained—immediate and future; a few intend to become teachers. In five schools a distinct effort is made to correlate the work of the Art department and that of the sewing and millinery classes. In one school the art training begins with the clay modeling, and is followed by posing and drawing the human form, study of historic costume and its adaptation to present styles. This ends with the pupil's making and wearing the modernized costume.

A much closer correlation between the Art and the Household Arts departments in all the schools would bring more satisfactory results. The work in the first year of the high school should have for its foundation the work done in the elementary grades. In most high schools it receives little recognition and no credit, and the first year's work is largely a repetition of that in the grades, instead of advanced work.

Kitchens and Laundries.

The interest was good or excellent in all of the schools. The practical character of the work is shown by the topics under discussion—"The Use of Milk as Food," "The Chemistry of Bread-making," "Food Preservatives and Cold Storage," "Food Preparation and Dietetics." Classes were making bread, beef hash, cream puffs, omelets. Practical lessons in buying food and in preparing and serving lunches are given. At the technical high school for girls, pupils of the second year prepare the school luncheon and so have practice in cooking in large quantities. The lunch room is self-supporting, in addition to affording valuable training

for the pupils. Classes specializing in this subject have four years of work and during the last two years devote ten hours a week to it. One pupil is preparing to be a caterer, others expect to be teachers of cooking in the schools. At another school a class of seniors prepare their own luncheon. Each girl in turn is the house-keeper, does the buying and keeps a careful account of the cost, which must not exceed ten cents per pupil. The girls are learning to prepare the food for a large number, to determine food values and relative cost. At another, luncheon is prepared in the same way, but the limit is five cents per pupil. At one school, the dining room has been partly furnished from the sale of articles cooked by the pupils. Teachers in this department are strong, capable and enthusiastic. With some exceptions, the kitchens are well equipped and attractive, and the implements are well cared for. In some of the older buildings, they are in basement rooms and with insufficient light. Contrasted with these, the finer equipment at the new buildings seems splendid and elaborate. Pupils choose cooking from love for the work, a desire to make good records, to fit for helpfulness and to help in home making, and to prepare for teaching. The cooking classes seem not so popular, nor the girls so enthusiastic in the best residence neighborhoods as in the so-called less favored districts. If this is true, the most skillful teachers should be secured for schools in such neighborhoods.

The laundry at the technical school for girls is the only one in use. Pupils were observed during a lesson on the washing of woollens. The discipline was excellent, interest strong, work very practical. After a full discussion of the nature of wool and the necessary precautions against shrinkage, the pupils went to the tubs and made practical use of the instruction received. Washing fabrics of all sorts, bleaching, removing stains, ironing, etc., are handled in the same way.)

Printing.

We found printing carried on as a regular part of the work at one of the technical high schools where there is a fairly good equipment for ordinary job work. Two teachers are kept busy, and it is an interesting and useful department. Quite a number of pupils observed at work showed a mastery of details and a degree of initiative which will presently fit them to act as shop foremen. We believe that the printing of many of the blanks in general use throughout the system and supplied by the Board of Education might be done here.

Apprentices.

About two hundred and fifty carpenters' apprentices were regularly at school, as required by their union, during the first twelve weeks of the calendar year. In the wood shop the younger pupils were occupied with individual problems and their work impressed us as careful, accurate and generally good. The shop work of the advanced classes was practical and on a surprisingly large scale. There were roofs of various styles, including one for a good size bungalow, a complete garage—built in sections for removal to the premises of the purchaser—stairways of various designs and many well-constructed articles of furniture. Evidently the young men value their opportunities. A splendid spirit prevails, and it was easy to mark the growth in power and in poise that comes with their progress through the four-year course.

Electrical apprentices, about fifty in number, attend one technical high school, coming in three sections, one-half day weekly. At another, some one hundred twenty plumbers' apprentices attend, in five sections, one-half day per week. Mathematics, English, drawing and shop work occupy their time. One section visited was in the hands of a capable teacher and the pupils were making verbal reports concerning a visit at a plant manufacturing plumbers' supplies. Their statements, though often faulty in English, showed clear thinking and their willingness to respond as called upon and to do their best was most interesting.

Summary.

We have found no general defects in the vocational work in the high schools, but numerous local shortcomings, as indicated in the foregoing reports. A few teachers, temperamentally at a disadvantage or lacking in teaching ability, are failing to obtain the best results. Some poorly lighted, crowded and inconvenient shops make the work in them especially difficult. In some of the schools, the brightest and most ambitious pupils choose other courses, so that the work done in the shops falls below the general standard of the school. In class exercises and lectures, the vocational teachers appear at a disadvantage. The pupils' recitations are generally of the memoriter type and lacking in "go" and general interest.

The vocational work in the high schools impresses us as being generally excellent and among the good features are:

The splendid opportunities for individual expression in the planning and working out of definite and worth-while problems. Pupils who by their own thought and labor have made a chair,

a pair of andirons, a vacuum cleaner, a school dress, hat and underwear, or who have prepared and served a meal, have accomplished much for their all around development.

The valuable training that results from working on group problems. Among these are a table for the school library; a lectern for the hall; furniture for the dining rooms; wiring boards and stands; a 2-cycle three horse power marine engine; an Oliver lathe No. 19 (listed at \$75.00); Christmas garments for needy children; a luncheon for fifty pupils from an elementary school in a poor neighborhood.

The opportunity for following one's bent and developing ability in special lines. Many pupils are eager students of wireless telegraphy; a dozen or so have self-made outfits in good working order. Others are interested in aeroplanes; two pupils have won prizes for models made by themselves. Other activities of this sort are the building of hydroplanes and other motor boats; experimenting in concrete construction; catering at home and for friends; making hats and dresses for mothers and sisters.

For improvements in the work we suggest the following:

A systematic arrangement for conferences of the teachers of the special lines of vocational work seems to us desirable. While the individuality of the teacher should always be dominant, much is gained by conference and discussion and the valuable results of experimentation should be public property.) One teacher reported no visitation in five years; with numerous others about the same is true.

A greater amount of co-operation between departments is desirable. The intimate relation of art to the making of hats and costumes, and to house and table decoration is apparent, yet we were surprised to find co-operation between these departments on the wane. Pupils find it tedious to work out their designs in advance; they want immediate results.

A large amount of note book work is necessary in some classes especially in household arts. At one school the drudgery of copying from dictation is avoided by having stencils made by the commercial department from which copies for filing in loose-leaf books are supplied to pupils at small cost. The plan seems admirable and might be generally adopted with advantage.

In all departments of vocational work, usefulness at home and elsewhere should be urged and encouraged. Especially in household arts, the mastery of methods and the acquisition of some skill in their application should lead to active service for the benefit of the family. Making and repairing wearing apparel; cooking, serving, and preserving; repairs and additions to furn-

iture; home wiring and installation are among the possibilities. We believe that there should be a system for the recording by the teachers of all these outside activities and that due allowance should be made for them in estimating the work of the pupil.

EDWARD C. ROSSETER, *Chairman.*

ESTHER J. W. BARKER,
Principal, Moos School.

FRANK H. CHASE,
Principal, Motley School.

NELLIE FALLON,
Teacher, Flower Tech. High School.

HORACE N. HERRICK,
Principal, Drummond School.

ABBY E. LANE,
Principal, Carter Practice School.

CATHERINE F. LYNCH,
Head Asst., McAllister School.

MARGARET MADDEN,
Principal, Haven School.

ELEANOR MAHANEY,
Head Asst., Burroughs School.

HERBERT L. MERRILL,
Principal, Cameron School.

WALTER F. SLOCUM,
Principal Schurz High School.

VOCATIONAL GUIDANCE.

"Teachers should be the sum of all trades and professions in their essences, for they must give out of themselves such things as will prepare children for any vocation."

Vocational guidance is the organized directing of the child during his school life toward a definite career, and on leaving its shelter, specific counseling and supervision until maturity. It is more than spanning the gap from school life to the liberties of the wage earner. In its scope vocational guidance must study carefully the child's abilities and desires; it must understand the requirements, chances and remuneration of many occupations. Knowing these, it must awaken the child to his own powers and show the way toward using those powers for his future livelihood, that thru careful instruction and keen interest he may choose that future life work wisely and well. Time was when the social and economic life of the teacher was that of the pupil. The pupil had intimate acquaintanceship with the duties which would devolve upon him later. This policy based upon a simpler social organization will not suffice today, for the moment we attempt to connect our schools with the present industrial life its complexity bewilders. In order to be beneficial the schools must know something of the influences of industry upon the people, of the educational and industrial activities being pushed by private initiative and by labor organizations, and of a score of activities hitherto considered outside the province of the teacher and school administration.

During this survey we were surprised to find how little definite information was available to the instructor. The opinion is unanimous that some sort of a "follow up" system is necessary. With vocational guidance not only may the child be thoughtfully and persistently followed up, but a record of his failures, endeavors and successes may be judiciously kept for the sake of the extremely valuable information which will guide those who later come to choose a life career. It affords an opportunity to profit by the experiences of others. A specifically designated central bureau should take charge of this work. That vocational guidance may be successful, the school must make a closer study of the child than it has thus far done and it must have closer co-operation with outside agencies to be competent to give advice and information. A school system that turns out thousands of pupils each year without a careful understanding of the require-

Vocational guidance should not be confined to the upper grades of the school, since many do not reach those grades. A system of guidance should come when the child first shows individual characteristics which point out even obscurely the bent of his talents. Statistics prove that 43 per cent never reach the eighth grade and 49 per cent—one-half of the entire enrollment—do not complete the seventh. In answer to questionnaires sent out by this committee as to whether the number who left school did so because of financial reasons, custom or loss of interest in study, etc., it appears that a great many pupils dropped out thru loss of interest. Parents on the whole, would be willing to make further sacrifices if they could be shown how much better equipped their children would be with more training.

This is a report of 262 schools.

	Boys	Girls	Total		Boys	Girls	Total
First Grade..	14	12	26	Seventh Grade	2470	1527	3997
Second Grade	137	29	266	Eighth Grade..	3877	2732	6572
Third Grade..	189	130	319	Ninth Grade...	657	278	935
Fourth Grade.	510	354	864	Tenth Grade...	259	153	412
Fifth Grade..	1359	742	2101	Eleventh Grade	56	35	91
Sixth Grade.	2030	1232	3262	Twelfth Grade	15	13	28
				Grand Total			<u>18873</u>

Vocational guidance does not proclaim itself as a panacea for all the problems of this complex age; neither does it mean the fixing of the occupation that a boy or girl should follow. Herman Schneider, Dean of the University of Cincinnati, says:

"The degree of strength of human characteristics can never be measured as can the strength of machines. The mind of even the lowliest man is too subtle a thing to be catalogued. Hence, the limitations of vocational guidance. I am of the opinion that for the present, vocational guidance can only point out in which types of occupations an individual will in all probability not be successful."

In its largest sense, then, vocational guidance should neither favor nor disfavor any class of pursuits, but carefully leave the child and his natural protectors to consider his needs, guiding toward permanent life calling. In order that the decision must come from within, the function of vocational guidance must be only to exhibit the work in which the boys and girls will take part. It must know the child, lead him to know himself, and let this information speak for itself. The responsibility will then rest upon those who make the decision.

In the various high schools and in a limited number of elementary schools, we are giving both guidance to the child while at school and information of the many kinds of employment which he may enter with profit on leaving. Its operations should be greatly extended so that every child, from his early years, should appreciate the day's work.

"I would have the school define the aim of the child's life in lessons of his own natural endowment and possible attainment. The child has a right to this kind of guidance, the schools must give it, and what the school gives must be determined by sympathetic instruction along the lines leading to the goal."

DEAN RUSSELL, Columbia Teachers' College.

Even the strongest advocates of vocational guidance do not dream that all pupils will become skilled workers. For many it will mean only the directing into the least harmful employment, but if ever the problem of the unemployed and unemployable is solved, child labor must be dealt with. Whatever the solution, whether through compulsory continuation schools, amendment to the child labor law, or improving work conditions, we must hold fast to the fact that we should conserve the child, admittedly the country's richest asset.

Vocational training, a broader term than industrial training,

is the setting forth of the skill and knowledge required in following all of the occupations, trades or professions, and furnishing opportunity for acquiring this knowledge and skill. It includes professional, commercial, agricultural, industrial training and training in household arts. Education today cannot afford to pick any one of these and place upon it undue emphasis, for, while everyone needs to be trained to work, to like it, and to do it well, it is the God-given right of every individual to make a choice for himself. The school system has felt the need and has responded with a marked degree of success to the wants of those who have the time to avail themselves of all the opportunities offered. These advantages have developed their capabilities and resourcefulness in meeting efficiently the duties of their vocations as well as the duties as citizens and individuals. 69 per cent of our elementary graduates enter High School. For those who leave school at the earliest opportunity, we must provide in addition to reading, writing, and arithmetic, a further training toward increased earning capacity, correlating them so that there will be a fuller understanding of the relation of the individual to society and industry. We should be as interested in the requirements of entrance into industry as into college. Education, then, must not only be universal in that it opens its doors to all, but must be universal in giving suitable training to all.

The general unrest and well-meaning agitation concerning the schools is only one phase of the widespread dissatisfaction with social life which follows too narrowly traditional lines. The introduction of industrial training is the first attempt to meet these conditions, but to some extent, we have failed to recognize its deeper underlying significance. We are now realizing that our industrial training is not a "side attraction," but represents a basic principle with a distinctly vocational aspect. It will attain to its highest usefulness, only, when it gives to the boy or girl a right understanding of his individual relation to the whole industrial world; for, indeed, the school curriculum is but machinery organized to convey to the child an understanding of life and his relation to it. To this end geography, civics, economics and the rest teach the history of industry, the social significance of commerce and the newer vocations connected with public utilities and social service. The early training must be broad, but not superficial; the later training intensive, but not narrowing.

Possible Direction of Expansion.

1. Extending industrial centers to every school.
2. Salesmanship.
(Fifty per cent of the girls employed enter the field of salesmanship.)
3. Elementary art trades.
4. Photography.
5. Telegraphy.
6. Agriculture.
7. Pharmacy.
8. Interior decoration.
9. Landscape gardening.
10. Drafting.
11. Library work.

The success of the day industrial school of the present time, as well as the vocational school of greater scope toward which we are striving, depends on the selection of courses suited to community needs, and close co-operation with the trades for which the training is given.

Some corporations in Chicago find it profitable to both themselves and their employees to conduct classes in business arithmetic and English, special attention being given to business letter writing, composition and dictation, as well as to courtesy, honesty and cleanliness. Special instruction is given pertaining to the technical features of these different commercial or industrial occupations to fit the ambitious for advancement. The co-operation between the business world and the educational world is most encouraging.

The situation presents to the school authorities an opportunity to assume the leadership in a new movement of vast educational significance. The school is the one force of sufficient opportunity and strength to stand firmly on the ground that the individuality of the child must be respected and fostered. We must organize further machinery within our public school system to make sure we are fitting the child for the world's work. There must be an agency that stands between education and industry giving up-to-date and reliable information to both. The point of contact between the schools and the employing public seems to be a central vocation bureau with information and placement as its double aim.

From May 5, 1913 to April 24, 1914 in Chicago reports from 262 schools, 18,873 children left school to go to work. Many who leave school at fourteen finally find their way into the John

Worthy School and other correctional institutions. Many others, when they have outgrown their positions, must give place to younger boys and at eighteen or twenty join the host of the unemployed, discouraged and unfit. This condition represents not only social crime but economic loss.)

The movement toward meeting this condition has been widespread. For several years Edinborough has maintained an educational information and employment bureau which is able to effectively carry on its work on account of the co-operation of the Board of Education and Labor Exchange. London, Munich, Glasgow and other foreign cities have done much intelligent work in this direction. In our own country Boston was the first to organize a bureau. Social agencies and school board co-operate in doing effective service. New York, Buffalo, Cincinnati, Philadelphia, Minneapolis, Los Angeles, Grand Rapids and Milwaukee have each formulated definite plans to suit local needs. A 1912 report on vocational training in Chicago made by a committee of the City Club calls attention to the need of vocational guidance. A number of the social organizations of Chicago have interested themselves in this form of service. Several of the department stores and firms which employ numbers have recognized the significance of the principles underlying this movement and have systematized this work.

In our own public school system much excellent work has been done. The technical high schools in particular have been active in organizing their own bureaus. A well-developed personal record card system is used in several of the elementary schools as well as in the technical schools. "Case" work is the method employed. The commercial department of the high schools is able to find satisfactory positions for many of its graduates by organized effort. In schools where the principal has a social interest, much actual guidance is given. In a number of schools the principals have recognized that education is not the end but the means to the end. In these schools the work is planned with vocational motive and special help given to individual pupils in securing employment after school hours. Vocational counsel in alumni and parent-teachers associations and social centers has been tried successfully and the further extension of this line of work is recommended. The Association of Commerce has a field representative giving his entire time to the vocational guidance of the school children. A considerable amount of attention is given to the problem of the transition period between the elementary and the high schools. It has

become the custom for the high school to entertain as its guests the eighth grade pupils from the neighboring elementary schools. Principals and the student body of these high schools also visit the grammar schools and talk informally upon the opportunities the high school offers. A small pamphlet entitled "Why Boys and Girls Should Go to High School" has been distributed and has been helpful. There still remains much to be done in this line. Eighth grade teachers complain that there is a lack of definite information available as to high school courses. The literature often reaches them late in the year and the quantity is limited.

The most far-reaching of any of the Chicago bureaus is the department of vocational supervision organized and supported by various societies and clubs in connection with the Board of Education. For full description see Report of the Superintendent of Schools, 1913, Page 204. A few statistics from this year's work of the bureau will give some idea of its extent. From October, 1913, to March 30, 1914, 1,442 applicants were received at the Vocational Guidance Bureau. 558 of this number were from the public schools; 211 applied for the first time; 189 were retained in or returned to school; and 412 were placed.

This card is given to the child when he is sent by the Bureau to an employer:

BUREAU OF VOCATIONAL SUPERVISION
BOARD OF EDUCATION
Telephone Central 3981

To
Address

INTRODUCING

Name
Address

who wishes employment in your establishment. Any assistance you may give him will be greatly appreciated by this Bureau.

Yours very truly.

Date

(Over)

(Opposite side of card)

To the Employer:

If you decide to employ the bearer we ask as a favor, that you will not discharge him without notifying this Bureau in advance, thus giving us a chance to remedy the difficulty or to find another position for him.

We ask those whom we place not to leave a position without notifying the Bureau.

Our object is to place permanently and well those boys and girls who are leaving school, and we ask your hearty co-operation.

Very truly yours,

....."

Of the 300 schools, however, only thirty-seven have been reached by the counselors of this bureau. The number of workers is too limited.

Although much of the work done is effective, we are failing to get the best results on account of lack of unity among the bureaus and the overlapping of work. Being so entirely individual it is difficult to say how extensive and effective it is. All who are interested can find employment, but unless all agencies, philanthropic, social and parental be brought into co-operation, much effort is wasted in collecting information and some may even work at cross purposes. Unless the work of vocational guidance is organized under the care of the public school system and an authorized head appointed, these various agencies will fail in helpful, mutual appreciation and support. Energies can best be conserved and efficiency promoted by a single director supported by the authority and prestige of the Board of Education. Most cordial and intimate relations should exist between this Bureau and the compulsory education department, the factory inspector's office, the health department, and the juvenile court. "Vocational education and investigations of industrial opportunities are throwing out splendid girders toward each other, but the meeting of the two at the central arch will never be consummated until placement is part of the masonry."

The survey committee recommends an organization of a vocational guidance bureau as an integral part of the public school system supplemented by a placement bureau.

To make effective the work of the allied bureaus, your committee recommend certain changes in the present child labor law.

Section I reads, "No child under the age of fourteen shall be employed, etc." We recommend that this be changed to read: "No child under the age of sixteen, etc." This section provides only for children employed. Through a mere technicality many children that work are unprotected. First: children who engage in so-called "street trades," namely, selling gum or papers. We recommend in addition, "No boy under twelve and no girl under eighteen be allowed to sell at any time on the streets; in cities of 50,000 or over, no boy under sixteen be allowed to sell after 9:00 P. M." Second: children employed in the home. The home is exempt from the visit of the factory inspector.

Section II provides for a register showing name, age, and place of residence of each child employed between the ages of fourteen and sixteen. We recommend the same requirement for *all minors*.

Section IV provides for filing certificates. We recommend: "*All minors* produce and place on file such school and age certificates."

Section V. Regarding issuing age and school certificates. At present the public school has a central issuing bureau located at the Jones School. All independent schools issue their own certificates from their own bureaus.

We recommend (a) "One central bureau shall issue all certificates." This would make it easier to enforce a uniform observance of rules and make opportunities for evasion more difficult. (b) "Each child shall pass a physical examination."

Mr. Raymond Booth, field representative in vocational guidance of the Chicago Association of Commerce in a statement to the Daily News, says:

"With all the stress that is being laid upon sanitary working conditions these days, practically no attention is being paid to the physical fitness of the prospective child employee. At the time of the granting of a work certificate, certain age and educational qualifications must be met, but little or no heed is given to the health of the child. Many boys and girls leave school for work who are in no condition to undertake employment of any kind."

Mr. Oscar F. Nelson, Chief Factory Inspector of Illinois feels that the need of medical inspection is one of the most serious phases of the entire problem of child labor.

Section VI requires proof of age. We recommend: "Birth certificates shall be presented at the time of the first enrollment of the child in school." Birth registration should be compulsory.

Section VIII relates to educational requirements. We recommend:

(a) "If age limit remains at fourteen a minimum of fourth grade work be required of normal children."

(b) "If raised to sixteen, a minimum of sixth grade work should be required of normal children."

(c) "To meet the cases of foreigners under sixteen, 'English' shall be inserted after 'read' and 'simple,' changing it to, 'who cannot read English at sight and write legibly simple English sentences.'"

Among the higher grade of employers, most of them demand

at least seventh grade work, and the tendency is to raise the requirement to the completion of eighth grade.

We recommend further:

(a) "Before the certificate is issued the child shall present written evidence from the employer that employment has been secured." (b) "Before a certificate is issued each child must have interviewed the Vocation Bureau." (c) "In cases of financial need, temporary certificates may be issued to children between the ages of fourteen and sixteen not to exceed six months. In such cases the child must attend evening school or continuation classes while working." Provision should be made for scholarships for worthy cases. There are in Chicago at present private funds available for this purpose. (d) "Vacation permits may be issued to all over fourteen to include holidays and time after school." In cases of 216 children who secured working certificates with the expressed intention of working only during the summer, 132 returned to school in September, the other 84 were lost. Hence the need of some system of temporary certificates. The necessity or renewal of such certificates will at least act as a check. (e) "Permits shall not be required for agriculture, horticulture and domestic labor out of school hours." (f) "Certificates must be returned by employer to Vocation Bureau immediately upon the leaving of the children with reasons for such leaving. A second certificate shall not be issued until the first is returned." Employers must be made responsible for obedience to law—in cases of corporations, managers should be made responsible. The Parental School should have jurisdiction over pupils up to the age of sixteen.

ELIZABETH W. MURPHY, *Chairman.*

MARY MCMAHON,

Prin. Irving Park School.

W. J. HARROWER,

Prin. Felsenthal School.

GEORGE A. BRENNAN,

Prin. Van Vlissingen School.

ANNA A. GAGAN,

Head Asst. Hamilton School.

LORI BROWN,

Teacher Cornell School.

PLAN FOR ORGANIZATION OF A BUREAU OF VOCATIONAL GUIDANCE.

It is generally agreed by advocates of industrial education that some effective form of vocational guidance is necessary if boys and girls are going to find that form of employment for which they are best fitted, and in which they may achieve success and profit, and if, on the other hand, industries are going to be recruited with efficient and contented employees.

There is coming a more and more insistent demand from the industrial world that the schools should educate boys and girls so that they will enter the industries with a higher degree of specific preparation and hence with an increased efficiency. With this demand comes also that for a more careful survey of the capabilities and environment of the children so that a more intelligent choice of a vocation shall be made. Undoubtedly much time and energy has been wasted by the lack of a scientific and adequate system of vocational guidance. If such a system could be organized and adopted by every school, a large proportion of the misfits and failures in the industrial life would be eliminated, and much of the individual and organized discontent which is now an alarming feature of our modern life would disappear. There would be a higher standard of civic and ethical responsibility and there would be at least no falling off in the cultural standards that now prevail.

The schools have always recognized the necessity of giving one kind of vocational guidance, in that the Grammar school has planned its courses to meet the requirements of the High school, and the High School to meet those of the College, which in turn has been recognized as the training school for the so-called learned professions. But now that the equal dignity and importance of the industries are coming to be generally recognized in the curricula of all these institutions, the difficulty of individual selection of a life work has become greater and more imminent. Since now, preparatory courses are limited for a large majority of the children to the Elementary school, a tentative selection must be made some time before the course is finished, in order that the child may not make a jump in the dark when he starts to work and probably enter a kind of work for which he has no fitness.

Many people believe that the Compulsory Attendance law

should be amended so that the children should not leave school to go to work until they are sixteen years of age, and the desirability of such a provision is obvious to those who have carefully studied the situation. Yet a recent court decision has shown that it is possible even now to retain all children in school until they are sixteen, unless they are required to go to work by a necessity which must be legally established.

It is interesting to observe that where a system of vocational guidance has been introduced in the seventh grade, the tendency to leave school as soon as possible has decreased, and many children have been induced thru their stimulated interest to remain in school, when under the old conditions they would have left as soon as they had attained the legal age. Wherever such a system has been instituted, its results in increased interest and efficiency have become almost immediately manifest so that everywhere it is being adopted by Boards of Education, and developed rapidly to meet the constantly increasing demands.

Vocational Guidance may be defined as the effort to give to each boy and girl the power to select wisely, and the opportunity to enter upon the work for which each is best fitted by ability and inclination. It is the part of the Vocational training to fit him as far as possible to enter upon such work. In all vocational guidance work there may be recognized three distinct functions:

(1) The work which is concerned with the study and training of the child in the school. This should include a study of his home conditions and of his physical and mental health. His training should be directed along such lines that he shall gain a fair knowledge of the great industries of the community, their nature, and the opportunities they offer to those who wish to enter them,

(2) A careful study of the industries of the community in order that there may be available for vocational advisers and for parents and others interested a body of vital facts relating to wages, opportunities for advancement and the necessary preparation to enter them, social and hygienic conditions, etc.

(3) A Placement Bureau through which boys and girls may be located in the position for which they are best fitted. Provision should also be made to keep track of the boys and girls after they have begun to work and to extend such friendly help as may be necessary and possible.

Every system of vocational guidance must be so organized as to make provision for the development of each one of these functions as each is essential to the performance of efficient vocational guidance work.

The first provision for such guidance was made in Boston in 1908, and in that city it has been developed to a higher degree of efficiency than elsewhere in the country. At the present time Vocational Guidance work has been authorized by the Boards of Education and organized with more or less elaboration in the following cities: New York, Philadelphia, Boston, Pittsburg, Buffalo, San Francisco, Milwaukee, Cincinnati, Minneapolis, Rochester, Grand Rapids, and in many other smaller cities. In Chicago, up to the present time, there has been no effort to introduce a general system of Vocational Guidance into the schools, altho many principals have worked along lines calculated to meet specific conditions in the schools with which they are connected and with noteworthy results. For a number of years valuable work has been done along these lines by organizations outside the schools, but necessarily their field of work is limited. Yet the remarkable results accruing from their effort and the constantly increasing demands made upon them bear witness to the necessity of a systematic and inclusive organization which shall be operated under the authority of the Board of Education.

After a careful study of the work as conducted in other cities in this country and of the conditions which prevail in Chicago at present, your committee would respectfully recommend that a Vocational Guidance organization be perfected which shall consist of a Vocational Guidance Bureau to be located at the offices of the Board of Education, at the head of which shall be a Director, who shall be in general charge of the work, and at least one Vocational Adviser in each school in the city.

The Vocational Guidance Bureau should consist of the Director and such professional and clerical assistants as the Director and Superintendent shall from time to time deem to be necessary.

The work of the Director should include the following:

(1) To advise, instruct and confer with the school advisers.

(2) To plan and direct a system whereby each child who leaves school to go to work may be followed up, and such assistance and advice given him as he may need from time to time. Also to keep on file in his office such data gathered from the various schools as shall be of value for reference and consultation. It is understood that the work undertaken by this Bureau shall not in any way conflict with or take the place of the work of the Compulsory Education Bureau.

(3) To organize and maintain a Placement Bureau which shall be conducted under his direction, and to co-operate with

industrial, social and philanthropic organizations outside the schools, in their efforts to place children in suitable vocations.

(4) To give advice and help to such children as the School Advisers may refer to him.

(5) As rapidly as possible to make surveys of the more important industries, especially of those which employ young people between fourteen and sixteen and to have the results printed in suitable form for reference and distribution.

(6) To perform any other duties appertaining to his office which may from time to time seem necessary.

The Committee recommends that the principal of each school, or some teacher appointed by him, shall act as Vocational Adviser.

The work of the Vocational Advisers should include the following:

(1) To advise pupils who intend to go to work. To furnish information to pupils and parents as to opportunities in occupations open to children.

(2) To confer with the parent always before a school certificate is given.

(3) To make out the school certificate after conference with the parent and pupil and mail it to the Central Bureau.

(4) To fill out in duplicate an informational card, one of which shall be mailed to the Central Bureau with the school certificate, and one kept on file at the school. This card shall contain such data as are necessary in advising and placing the child intelligently.

(5) Acting in cooperation with the Compulsory Education Bureau to keep track of all children to whom work certificates have been given, to ascertain whether they are actually at work, where such work is and as far as possible the conditions under which they are laboring. This information should be entered on the pupil's card and kept at the school for reference.

(6) As far as possible to keep in touch with the employers of children in the neighborhood and to advise the Central Bureau of needs and conditions in local establishments.

(7) To attend meetings called by the Director and to perform such other work as may be necessitated by the vocational demands of the schools.

The Central Bureau should always act in harmony with the Bureau of Compulsory Education, both in reference to the "follow up work" and the issuance of work certificates. In all cases where necessity arises the powers of both departments should be concentrated to accomplish the observance of the law, and consequently the highest interests of the child.

In conclusion it should be said that the Committee does not expect that the organization outlines shall be perfected at once in all details, but the plan is presented as an ideal toward which we may work as rapidly as may be.

CHARLES W. FRENCH, Chairman.

CORA CAVERNO,

Prin. Copernicus School.

THOMAS C. HILL,

Prin. Curtis High School.

M. THERESE NORTON,

Prin. Thomas School.

HANNAH SCHIFF,

Prin. Mulligan School.

FRANK W. STAHL,

Prin. Gary School.

DANIEL TEAR,

Prin. Gladstone School.

ALMA M. WLILARD,

Prin. Brownell School.

SPECIAL SCHOOLS.

Under the title "Special Schools" five different kinds of children are given special training in the public schools of Chicago—namely, the subnormal or backward, the blind, the epileptic, the deaf and the anæmic. To carry out the survey of these divisions the committee, which was composed of twelve members, was divided into five groups, each of which was assigned certain schools including at least two of every class. In all there were ninety-six special divisions, forty-six for the subnormal, sixteen for the anæmic, three for the blind, twenty-nine for the deaf, and two for epileptics. All of these divisions were visited by one or more members of the committee, and as a consequence every member secured acquaintance with each kind of special schools.

Special Centers for the Blind.

Centers: Instruction for the blind is given in three school centers—the Jahn on the north side, the Ericsson on the west and the Felsenthal on the south. According to the census of 1912 there were 259 blind children in Chicago. Only about fifty were enrolled in classes for the blind. The committee, however, was not able to ascertain how many of the 259 were children of school age. The expense of carfare, not only for the blind children, but for the companions when such are necessary, is defrayed by the Board of Education. There are no special centers for the high school pupils, the blind children graduated into the ninth grade being prepared to enter the high schools of their districts on a footing almost equal to that of the seeing pupils.

Aims: To give to the blind child the opportunity of growing up in a natural environment and to provide him such training as will enable him to mingle later on in the business and social world as nearly as possible like a normal member of society.

Plans: The room for the blind at each center is in charge of a special teacher, but the time of the pupils is divided between the work in the special room and that of the regular grade class rooms, the work in the special room being of necessity largely individual and supplemental. For the first year or two the blind child spends his time almost entirely in the special room, but after he has mastered the Braille print and has gained enough confidence and self-control to go about the building, he becomes an active

member of the school community. As he advances through the grades he passes more and more of his time in the regular class rooms until in the upper grammar grades he comes to the special room only for preparation of home lessons and for occasional special assistance.

Equipment: Each center has been furnished with one typewriter, a Braille writer, number slates, Braille slates and Braille text books. At the expense of the Board of Education the Braille books are made in the printing office of the Felsenthal School, where brass plates of the texts are kept. When the plates are not available, the teachers themselves make the books on the Braille writer.

The blind pupils in the high schools are materially handicapped by the fact that not all their texts are furnished in Braille.

The Course of Study: Blind pupils follow in the main the regular curriculum of the grades. The initial task, of course, is the mastery of the Braille print, which takes a child of average mentality about as long a time as is required by the ordinary pupil to learn to read our regular type. After the blind pupil has mastered the Braille, he needs, in all branches but arithmetic and geography, very little assistance outside of the regular teaching given the seeing children.

Arithmetic is taught by means of a number slate devised by the supervisor and made in the foundry of the Lane Technical High School. By means of this slate the blind pupil can follow any explanation and show the solution of any problem in pretty much the same form as the seeing child solves it at the blackboard.

The arithmetic text book contains embossed diagrams and figures as aids in teaching mensuration.

In geography a Braille copy of the regular text containing embossed maps is used. This text is supplemented by dissected wooden maps of all countries and by a home-made relief globe. In one room the pupils use the Atlas relief maps furnished the regular grades.

Each pupil carries with him a Braille slate and stylus which he uses in taking notes and preparing work for inspection. Later he transcribes this product into typewritten form. The work of the younger pupils must be typed by the special teacher, but by the time they have reached the fifth grade the pupils have learned to use the typewriter themselves and transcribe their own work, passing in required written work and test papers in typewritten form.

Special attention is given to the training of the hand by

means of the various handworks, knitting, crocheting, sewing, bead work and basketry. The older children take the regular courses in manual training and cooking, a special cooking note book being prepared for the girls and a special ruler with raised lines marked to one-eighth of an inch being provided for the boys in the manual training shop.

Watchful care is given the physical development of the blind child. Under the direction of the department of physical culture, a special teacher visits each center about once a fortnight and outlines the work for the room teacher. The school gymnasium is regularly used.

The Pupils: Blind children seem more nearly normal than other defective children, the majority entirely so, except for the one physical difficulty of lack of sight. In the school rooms they are treated by the teachers exactly as are the seeing pupils, and they participate in school exercises on equal terms with the seeing children, and creditably, too. The work which the blind do along academic lines is very gratifying. In every case the grade teachers expressed perfect satisfaction with the attitude and work of the students. In all three centers they read accurately and with feeling. They expressed themselves in geography and mathematics carefully and logically; spelling words dictated by the teacher were written in Braille almost as rapidly as the seeing children wrote in longhand; work done on the typewriter was neat and accurate and recitations were heard in locational geography that would have been a credit to seeing children. The interest of the blind is invariably intense, not only in the regular work but in all activities of the school, and they participate in discussions and debates with all the freedom of normal children. By means of the Ziegler Magazine they are up to date on current topics and can discuss with vigor the Mexican situation or the latest game of baseball.

Arrangements have been made by which Braille books from the Public Library are sent out to the centers for the blind.

Results: The foregoing method of training the blind has been worked out in Chicago since 1900 and has brought most gratifying results. The pupils, with the exception of two or three, are up to grade and some are better than the average. Three are to be graduated from the elementary schools this June, eight are doing creditable work in the high schools, and one in the University of Chicago. Formerly it was considered absolutely necessary that a blind child be separated from home if he desired an education. The work done by the public schools has proved that the blind may receive careful training and at the same time grow up in

the normal environment of home and family. Doubtless the efficiency of the instruction is due to a great extent to the fact that the preparation of nearly all work by the pupils is carried on under the direction of the special teacher who is at hand to explain, correct and guide.

Recommendations.

(1) The committee feels that additional equipment would add to the efficiency of the work. One typewriter for each room is not an adequate supply. One of the teachers expressed a strong desire for a good foot-power loom. All three very much wished for sewing machines.

(2) Since the choice of life work for the blind is, to an extent, limited, more attention should perhaps be paid to early guidance for vocational decision. If so, we suggest that the Vocational Bureau co-operate with the supervisor of the department in satisfactorily placing blind pupils.

(3) The work of the blind, however, is seriously handicapped by the lack of a regularly appointed printer whose business it should be to prepare all necessary texts. A more than ordinary printer is needed, as he must be conversant with the matter to be taught. What is really needed is a *printer-teacher*. At present one of the manual training teachers devotes his Saturdays to this work, but naturally fails to supply the wants. This man formerly spent all his time at this work, but, like others, gave it up because of greater inducements along other lines. The failure to keep a man in this position is due to the fact that the salary is altogether inadequate, other lines of special work offering greater opportunity as to salary and advancement. The time of such a man might be fully occupied if he taught the manual training in all the centers and spent the rest of the week in the printing office preparing necessary plates and books. It seems a matter of poor economy to limit the possibilities of a work for which otherwise adequate provision has been made because of the need for one more salary.

Special Divisions for the Deaf.

The department for the deaf, the oldest of the special departments of the Chicago public schools, was organized in 1875. The manual system was taught exclusively until 1895, when the first oral class was established. For a number of years both the oral and the manual systems were taught and parents were permitted

to choose which ever system they preferred for their children. Gradually the manual system was superseded by the oral system.

The same year that the oral system was introduced a training class for teachers of the deaf was organized at the Chicago Normal School, where a graduate course was offered with a scholarship of \$300, as an inducement to students to undertake this training. This arrangement failed to attract the necessary number of teachers to meet the demand, and in February, 1914, a two-year under-graduate course that promises to solve the problem of obtaining a sufficient number of teachers was offered at the Teachers' College.

The policy recently adopted of grouping the divisions for the deaf in a few school centers has proved a wise one. Better grading of pupils has thus been affected, and a saving of special equipment has been brought about. Parents are urged to move into the districts in which these special schools for the deaf are located. The Board, however, pays carfare for all pupils who live at a distance, and in some cases pays a small sum for an attendant.

The classes in Chicago are graded according to their language ability. In several European countries the classification is as follows:

- (a) The semi-deaf.
- (b) Totally deaf from birth or before acquiring speech.
- (c) Dull and backward and totally deaf—like class (b).
- (d) The feeble-minded deaf.

In nearly every class visited pupils of the first three types were found and often of the fourth type also.

The committee recommends (1) that pupils of the above classifications be segregated, as far as practicable, for more efficient teaching; (2) if, after two or three years of trial with the oral method it is evident that any child of type (c) is not making satisfactory progress, the committee believes that it is inadvisable to continue to teach him by the oral method, and recommends that the child be sent for instruction in some form of manual expression to a center to be established for this purpose; (3) that pupils belonging in class (d) should be excluded from the public schools. Though any suggestion contrary to teaching the purely oral method is heterodox, the tremendous time spent in attempting to teach these children by the oral method might be more profitably utilized. In at least one excellent system of schools the very slow children are taught the manual method and are given special training tending to make them self-supporting.

When given proper facilities with which to learn, it has been demonstrated that deaf pupils show no marked inferiority

in economic efficiency. There is no intrinsic reason why boys and girls who are deaf should not be graduated from the Chicago public schools, well equipped for honorable self-support, able to make a living without asking allowance for their affliction. The most important service the public schools can render the deaf is to train them so that they can mingle with their fellows on equal terms.

Equipment: A room in each center is provided with zinc-covered tables, zinc-lined cabinets and chests, potter's wheels and tools for clay-modeling. Except at the Parker Practice School, which is badly crowded, each center is also provided with a printing outfit. This printing outfit is the only strictly vocational training equipment furnished particularly for the deaf pupils, as the regular school equipment is utilized for the manual training, cooking, and sewing which are now being taught to the deaf pupils of the higher grades. More work leading directly into vocational lines should be given. The school life of the deaf children may well be prolonged until they are at least eighteen years of age.

Rhythmic exercises have been found exceedingly valuable in training the attention and power of concentration of these pupils. For this reason pianos have been furnished the different centers. Although many pupils have spent several years in these centers, it is deplorable that an even ordinarily pleasing quality of voice has not been developed. Further than this, it is almost impossible for a stranger to understand the ordinary conversation of these pupils on account of the dead metallic quality and monotony of their tones. The acquisition of more pleasing tones may be too high a standard to set for the deaf, but it is highly desirable if attainable, and we suggest that a teacher who has made a specialty of the right development of the voice should be assigned to each center and should give the children expert instruction as to overcoming the false habits of enunciation and of voice production to which the deaf, as a rule, are liable. For the work of each such teacher, a sound-proof room ought to be provided where she can have the right conditions for observing the speech of the individual pupils and where she may give to each child in turn whatever personal suggestions are likely to be of value. Any instruments or apparatus that have been found useful in this work should be provided.

Physical Education: It is evident that the physical defects of deaf children may require scientific attention beyond the scope of the regular school doctor. In this connection, the suggestion is made that a separate corps of physicians and nurses should be assigned to all the special divisions of the schools, including the deaf divisions. Not only in any given case could better results

thus be obtained, but the general study of the defectives in the schools would also be thereby considerably promoted.

Corrective gymnastics should be an important part of the course prescribed for the children in the special divisions for the deaf. The work should be under the charge of a supervisor who has had special training along this line and who should visit the centers as often as possible. The corrective gymnastics would necessarily be individual and should be approved by the physician assigned to the special division.

Nutrition: Most of the children in the centers for the deaf come long distances to school and virtually all of the pupils of this description bring cold lunches. Some measure ought to be taken to provide them with a warm meal daily.

There are two hundred and sixty deaf pupils in the Chicago schools. They are cared for at three centers—the Parker Practice school, having ninety-eight pupils and twelve teachers, the Edward Delano center, ninety-one pupils and ten teachers, the Waters Center, sixty-three pupils and seven teachers. At the Kozminski School there is one teacher with eight pupils. As soon as possible this center should be closed and the pupils transferred in order that the pupils may be properly graded.

Centers for Anaemic Children.

Boards of Education, being charged with the training of all classes of children in the community, may properly undertake the provision of special hygienic measures for children of low vitality. Work along this line was begun in the fall of 1909 by the establishment of the first open-air school. Today we have fourteen such centers with an enrollment of more than five hundred pupils.

Centers: The centers for anaemic children are of two classes, (a) "open-air rooms" on the roofs of buildings, and (b) open-window rooms in regularly heated class rooms in which the windows are constantly kept open, supplying air directly from the outside. Several types of windows are used, the most satisfactory being the inverted awning by which the air is deflected to prevent drafts. Several rooms in the building are usually at the service of the "open-air crusaders," a recitation room, a dining room with kitchen attached, and a rest room fitted up with sleeping cots.

Plan: The work is carried on under three agencies, (a) The Board of Education which furnishes the teachers, the class rooms with their equipment, and school supplies; (b) The Elizabeth McCormick Memorial Foundation which defrays the expense of physicians, nurses, matrons who cook and serve the food, spe-

cial clothing, and cots; and (c) The Municipal Tuberculosis Sanitarium which furnishes the food.

Purpose: The academic phase of the child's development is a secondary consideration—soundness of health and physical development being of prime importance. The curriculum is adjusted to give first place to the care of the child's physical welfare in the effort to build him up so that he is able to resist the tendency to disease. To this end four factors are utilized—fresh air, careful medical examination and supervision, proper food and rest.

The supply of proper food is a most important feature of the regimen since home conditions are often unfavorable and because many of the pupils live at a distance from the centers. The dietary is planned by the McCormick Foundation under skilled direction. The aim is to supply each child with one thousand calories per day.

Careful medical examinations are made and the condition of each child is studied and tabulated. The temperatures of each pupil is taken daily, and the children weighed at least once a month. Special care is taken to remedy physical defects as far as possible.

The Pupils: Children admitted into the open-air and low temperature rooms are in the main those of tubercular tendencies, though anaemic pupils and those of low vitality are not refused. No pupil with an open lesion is enrolled. Since these rooms are ungraded, the memberships are smaller than usual, the maximum being thirty. Freedom from restraint marks the government. The "atmosphere" of the rooms is invigorating and inspiring.

As a protection from the cold, the pupils are furnished blanket Eskimo suits loose enough to allow the wearers to work and exercise with all due freedom. Cleanliness is insisted upon.

Routine: The program is planned with primary consideration for the physical needs. When the pupils arrive in the morning, breakfast consisting of a cereal and milk or hot milk or cocoa is served. Incidentally table courtesy is inculcated. After breakfast, the children go to the recitation room where the regular program is carried on, broken into at intervals by the visits of doctor and nurse. Light gymnastics and breathing exercises are important items. At 11:20 a. m., the children prepare for the dinner hour, which is a time of sociability and good cheer. This is followed by the tooth-brush drill and the rest hour, a period of complete relaxation when absolute quiet is insisted upon and sleep encouraged. School work follows for the rest of the day. Some experiments have been made, eliminating the rest period, to determine

what factors contribute most to the improvement of the children, but not enough has been done to permit of any definite statement.

Results: The physical improvement of the children is shown in brighter eyes, more alert movements, regular attendance, and increased interest; more scientifically by the gain in weight. Because of the many interruptions and the time spent in the care of the health, academic progress would seem to be slow. However, the increased mental efficiency and more regular attendance counteract the loss of time. Discipline is practically nil. Teachers and principals alike seem enthusiastic about the results. The direct work done with the children is hardly more valuable than the "follow up work" carried into the homes, where parents are instructed in food values, the effects of cleanliness and ventilation and the laws of hygiene generally.

Recommendations: Recommendation is made that in planning new buildings:

(1) Provision be made for rooms exposed on three sides to air and sunlight and supplied with direct heat. That expense is not a prohibitory item has been demonstrated by the work which for more than a year has been carried on with marked success in one public school where funds have been furnished by the school and community.

(2) The desks and seats occupied by the pupils be easily adjustable.

(3) Sanitary appointments, including convenient toilet arrangements, be as perfect as possible. Vacuum cleaning and washing of rooms should be frequent and furniture should be simple to facilitate cleaning and to prevent dust accumulations.

(4) Some form of musical instrument be a part of the equipment.

(5) There be much corrective gymnastics, rhythmic games and breathing exercises under a doctor's direction.

(6) If possible, a community garden or conservatory be provided, and nature study be given special emphasis.

Special Schools for Crippled Children.

Two schools for crippled children are supported by the Board of Education—the Spalding School on the West Side and the Fallon School on the South Side. The buildings have been especially designed for the comfort and safety of the children. The corridors are wide, and the rooms have wide aisles for those children who are obliged to move about on crutches or wheel chairs. There are no stairways.

Admission: Before admission to the Schools for Crippled

Children, all pupils are given a physical examination by a regular physician, and mental tests by the Child Study Department.

Membership: The Spalding School has six divisions and one hundred and sixty pupils in attendance. From ten to twenty children attend the school regularly from the Home for Destitute Crippled Children. The other pupils are carried to and from the school in nine 'busses supplied by the Board of Education. The city gives the services of a policeman for each 'bus, who rides with the children and helps in their care. Although the school accommodations may seem to be ample, they are not sufficient to provide for all crippled children who desire to attend, as twelve or fifteen pupils have been refused admission to the Spalding School this year, on account of lack of room.

Instruction: The pupils receive regular instruction in cooking, manual training and sewing, in addition to the regular academic work. In order that the girls may have some experience in cooking large quantities of food, they provide the school luncheon once a week. This means, they prepare food for one hundred sixty pupils. It is thought the work may open an avenue which will lead some of the girls to self-support.

No special class of children need more help than the crippled. Nothing that can make these children even partially self-supporting should be neglected. Therefore any equipment that will provide instruction leading into a useful vocational line should be provided. It is recommended that typewriters, sewing machines and material be furnished upon request.

Physical Care: The Board of Health provides a nurse, who remains at least two hours in the school each day. She dresses all wounds and gives proper instruction against possible contagion. The Board of Education provides necessary surgical dressings and medicine. The School is provided with a rest room, containing three beds, where pupils who find school work too fatiguing are permitted to rest a certain period each day.

In both the Spalding and the Fallon schools, a luncheon is provided each day, the services of a cook and the food being paid for by the Board of Education.

Physical Education: A special teacher has been assigned to the work of giving the pupils the amount of physical education best suited to their condition. She visits the school twice each week. Her work is generally in the line of corrective gymnastics and is especially fitted to individual cases. A great improvement has been noticed in the carriage of pupils who had acquired faulty habits. In connection with this work, it is interesting to know that one child who had never walked has learned to do so since

she has had this instruction. Pupils are also taught to take part in plays and games.

At the Fallon School on the South Side, there are two divisions of fifty-six pupils. The work is similar to that at the Spalding School. A charitable society provides funds for the care of seven destitute children who are cared for in a private home called Happy Haven. These children are taken to school in regular school 'busses. In addition to the cooking, manual training and sewing regularly taught, a teacher has given instruction in typewriting and cobbling shoes. She feels that the first subject especially is particularly helpful, as copying on the typewriter is profitable and a kind of work which these children may do readily.

Recommendations: There are many crippled children of school age who cannot be provided for in centers already established. As before stated, the Spalding School is now overcrowded. A new center should be opened on the North Side. At the Fallon School there is room for one division, but the present 'bus service does not extend further south than 58th street. Instead of opening a new center for pupils living south of 58th street, between Western avenue and the Lake, if an automobile 'bus could be provided such children could be transferred to the Fallon School at less expense.

Bedside Teacher: In addition to the teachers who are assigned to each division of the school, this year a bedside teacher has been appointed to the Home for Crippled Children to teach those who are obliged to remain in bed. There are many children in the Home for Crippled Children who are suffering from various forms of spinal disease and who are sometimes strapped to a board for months and even for years. Until this year they received no instruction. This teacher visits the bedside and with a portable blackboard and other necessary equipment, gives each child such work as he is able to do. The progress made by the pupils has been more than satisfactory.

Special Divisions for Subnormal Children.

The Royal College of Surgeons, London, defines a feeble-minded person as "one who is capable of earning his living under favorable circumstances but is incapable from mental defects existing from birth or from an early age of (a) competing on equal terms with his fellows, or (b) managing himself and his affairs with ordinary prudence." Dr. Goddard of the Vineland (N. J.) School goes further and says a subnormal child is "one who is unable to do school work at the usual rate." These children he divides into two classes, "(a) the temporarily subnormal or retarded,

(b) the permanently subnormal or arrested." The latter, who are the feeble-minded, he divides into three classes according to their mental ability, namely, *idiots*, *imbeciles* and *morons*.

The observations of the committee and the records of the Child Study Department confirm the opinion, aptly expressed by a member of the committee, that we have in the divisions for the subnormal a "hodge-podge" made up of children suffering from:

(1) Physically abnormal but reparable conditions—adenoids, bad teeth, diseased tonsils, eye-strain, special sex abnormalities.

(2) Sick children—those suffering from chorea, heart disease or scoliosis.

(3) Motor minded, peculiar and nervous children.

In addition to the foregoing classes of temporarily retarded children we have also in these rooms some children that are permanently retarded or feeble-minded. Cases of doubtful classification near the border line of imbecility are sometimes admitted to subnormal rooms to await further examination. Often these pupils remain a long time, associated with children of distinctly higher mentality before it is decided that they are not proper subjects for the public schools. No mistaken notions of kindness to such non-educable children should be allowed to operate against the interests of the others. The non-educable are distinctly custodial cases, and all sympathy felt for them should be expended toward obtaining an adequate number of institutions for their care. Society in general, and parents in particular, should be brought to understand that the responsibility for these cases does not rest upon the public schools. One hundred of these unfortunates found to be hopelessly imbecile were excluded from the subnormal rooms during the last year as belonging to the class Witmer prefers to designate as the "socially defective," or "socially unfit." In neglecting this class of misfits in the public schools and in making no provision for their care, the city pursues a short-sighted policy, the history of pauperism and crime in various degrees proving how expensive they become in later life.

The committee believes that the *temporarily retarded* pupils should not be compelled to mingle with the *permanently retarded* or *feeble-minded*. Therefore we recommend that provision should be made for classifying the backward children into at least two groups: (1) those who are permanently arrested in their development, or the *morons* above referred to, (2) those who are *retarded* but may recover their standing in the regular grades. To this end there should be at least two rooms at each center, one for the first group with a membership limited to fifteen, the other for

the second group with a membership of from twenty-five to thirty pupils.

The experience of bringing the deaf together in large numbers has suggested the feasibility of centralizing in good neighborhoods several divisions of backward and mentally defective children. Vacant buildings in good condition in several sections of the city might well be equipped and utilized for this purpose. This plan would possess many advantages in the enthusiasm that results from numbers and in the help that teachers would derive from companionship and from mutual exchange of ideas and by reason also of the benefits of closer supervision.

The committee suggests further that the classes for morons be divided into three groups, those in the lowest class to be known as Class C, to be promoted after a time, if possible, to an intermediate class to be called Class B. These pupils rarely succeed in advancing beyond the academic requirements of grade four. When they have accomplished this and are not able to work in the regular grades, they should be formed into a third class to be called Class A, and given pre-vocational training such as is now provided for the elementary pupils in the Technical High Schools.

Equipment: The equipment of special centers for backward children consists mainly of desks, lockers, looms and four-pupil manual training benches. As rapidly as possible the fixed desks are being replaced by movable tables and chairs. In like manner, the four-pupil manual training benches are giving way to combination manual training benches and lockers. The new equipment is a decided improvement, as it provides for greater freedom for the pupils and allows floor space needed for games and exercise.

As, on account of the limited space, no provision for gymnastic apparatus in these rooms can well be made, we recommend special provision for regular training in the school gymnasium under the supervision of a special teacher of physical education.

Personal habits of order and cleanliness can not be insisted upon too strongly. Therefore where bathrooms are installed at least two full baths a week should be given. If this be impossible, then each room should be provided with a lavatory and a plentiful supply of towels and soap.

In addition to the usual forms of manual training, it is suggested that where special centers for backward children are established provision for school gardens be made and tools furnished so that pupils may obtain the benefit of outdoor work, with its tremendous possibilities for mental and physical development.

Teachers: The teachers are conscientious, enthusiastic and

sympathetic, alive to the social and moral problems involved. Their efforts, however, are often wasted because they have no special training for teaching this class of children. Furthermore, the Child Study Department can not legally make a complete physical examination. Laws should be enacted which will remedy this defect. It is recommended that parents be required to be present during any such physical examination and be given the information that will bring them to a realization of their duties and responsibilities.

The teacher also should be furnished with sufficient data upon which to base her instruction.

As regards the Course of Study planned for backward pupils, the committee believes that it should be adapted to the individual tastes, capacity and development of the pupils in question, rather than made to measure up to the standards and ideals of the regular class-room. Backward children in particular develop best in a happy environment, and may be most profitably occupied with those things which can be attempted with some degree of success. The committee has found in some places exceptionally good hand-work, including woodwork, basketry, pottery and textile fabrics. On the other hand in many places the hand work was of mediocre quality, owing to the teacher's lack of vision and preparation. More and more in the manual work the vocational side should be emphasized and such problems chosen as will make advance possible in progressive steps, but allowance should be made for individual capacities and preferences. As a liberal portion of school time has been allotted to this subject and as the Board of Education has been generous in supplying tools and material, the results should be commensurate therewith.

To aid in obtaining specially trained teachers, the committee recommends that the following courses be offered at the Teachers' College to experienced teachers who elect to take up this kind of work:

(1) Child Psychology, with special attention to the correction of mental defects.

(2) Physiology, correction of speech, and abnormal conditions generally.

(3) Gymnastics. At present too little is done to correct faults of carriage or lack of co-ordination. Narrow chests, slouching gait, and feeble muscular control receive little or no special attention. Nor is sufficient attention given to the fatigue limit so easily reached in these children, and so destructive if not considered.

(4) Manual training.

Experienced teachers who desire to make this special preparation should be granted at least three months' leave of absence for this purpose without loss of pay. The committee feels that this would be a really economic measure. The overhead charges for these divisions are at present enormous. The added expense to the taxpayers in giving this special training to teachers would be more than compensated for in the increased efficiency of the output. In addition to the special preparation outlined, the teacher should have a genuine aptitude for this kind of work, and by sympathetic insight, good temper, and the cheerful disposition which accompanies perfect health and sound nerves, be a source of inspiration to the backward or retarded child.

Number of Centers.

Dr. Goddard, who has studied 10,000 feeble-minded children, states that from one to two per cent. of every school is mentally defective. Applying his figures to the school enrollment of Chicago, which was 294,612 for the year 1912-13, there must be about 3000 such cases in the Chicago public schools, including idiots and imbeciles, who constitute a very small part of the total. With these figures in mind, it is readily seen that forty-six rooms is not sufficient number to provide for this class of pupils. We therefore urge that the number of divisions be materially increased.

Special Recommendations.

In conclusion we further recommend that:

- (1) Since parents object to the terms "subnormal" and "backward" as being of a stigmatizing character, the name "Auxiliary Schools" be adopted from the German instead.
- (2) In the case of permanently retarded children the boys and girls be taught in separate divisions and provided with special toilet facilities.
- (3) A campaign be inaugurated for establishing near Chicago an institution for imbeciles.
- (4) A piano or some other musical instrument be placed in each room for backward children.
- (5) Rooms for backward children be opened in one of the Practice Schools for the special training of teachers of backward children.
- (6) The Board of Education be empowered to have such physical defects as adenoids removed, to furnish glasses when needed

to the children of indigent parents, and to provide lunches when prescribed by the physician. Special laws should be enacted authorizing examination and medical treatment.

(7) A special and detailed examination under the direction of the Child Study Department be made of all children considered subnormal, including those who have spent more than two years in their present grade.

County Hospital Special Division.

During the present school year, a special room has been established in the venereal ward at the Children's Annex to the Cook County Hospital. One end of a ward is fitted up for a school room, and here a teacher carries on the regular school work for five hours a day. The Board of Education pays the teacher's salary, furnishes desks, a portable blackboard, books and the ordinary school supplies. The average number of pupils in attendance is 15. The greater number is in grades one and two, but a few have been enrolled in grades three, four and five. The average time spent by the pupils in this room is three months and during this time the children, although weak physically, are regular in attendance and are able to do the grade work acceptably.

It is recommended that special divisions be opened in Cook County Hospital for children convalescing from other contagious diseases. Frequently these children are kept several weeks and would be able to do school work, if a suitable kind were provided.

Special Divisions for Epileptics.

Because this department has just been established, not much can be reported in the way of survey, but some considerations seem advisable toward shaping the future policy of the Board of Education toward these unfortunates.

Except that imperative circumstances demand that something be done to keep epileptic children of school age off the streets and yet out of the ordinary school rooms, it is hard to see any reason for the existence of special divisions for epileptics. They rightfully belong in special separate institutions entirely away from such schools, preferably in the country, but easily accessible from the city.

According to the best information obtainable by your committee, there are more than five hundred epileptic children of school age in Chicago. Of this number a great majority are as yet almost wholly unprovided with adequate care. It is greatly to the credit of the present school administration that for the

first time in the history of Chicago systematic measures have been taken to deal with such cases. During the present year the first special divisions ever opened for epileptic children in the Chicago public schools have been established—one on the north side at the Jahn School, with a membership of six pupils, and one at the Washington on the west side, with a membership of five. One is to be opened soon at the Mark Sheridan School on the south side. This small attendance is partly due to the fact that the Board of Education has not yet made an appropriation for transportation, but funds will be provided for this purpose in the near future.

The equipment of these special divisions is the same as that of an ordinary school room, with the addition of a mattress placed on the floor in a corner of the room, so that a pupil may lie down whenever necessary. The addition of a screen and light blanket for covering might add to the comfort of the patient. It is suggested that one meal a day be given in school to these children, not only on account of their carrying cold lunches but also because of the importance of dieting in the treatment of this disease; further, that parents be furnished diet lists, and that mothers be instructed in the proper care and feeding of the patients.

Dr. William Healy, director of the Juvenile Psychopathic Institute in Chicago, says: "The epileptics are not wanted in school. They cannot be tolerated in a business position. They are dangerous to themselves and others in almost any factory or workshop, and they are not even wanted in the reformatories." . . . "The hospital for the insane is not a proper place for an epileptic who is not considerably demented."

In the judgment of your committee the State of Illinois ought to establish an institution for this large class of defectives, where the perils to the patient himself as well as to the community would be controlled, where the ailment could be studied, and where the patient's condition, if possible, could be improved. There are no better terms in which to urge this measure than the following words of Dr. Healy:

"The non-segregation of epileptics in Illinois, despite many appeals to the legislature, is utterly uneconomical, unsympathetic and in general significant of a partly civilized state of social consciousness. The tears of afflicted mothers, the heartbroken discouragement of the epileptics themselves, when they are not too far gone to care, and the vast costs and injuries endured by society on

account of crimes and vices committed by epileptics all cry out together against such wanton neglect."

Respectfully submitted,

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L. W. COLWELL, Secretary,
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Penny Lunches.

The first penny lunch was opened in the Chicago Schools upon recommendation of a member of the Board of Education, Mrs. P. J. O'Keeffe, at the Adams School in 1911. The result of this experiment was so satisfactory that the opening of the penny lunch rooms at the Foster and Washburne followed.

The Chicago School Extension Committee, composed of delegates appointed from sixty or more Women's Clubs in and near Chicago co-operates with the Board of Education in maintaining these three penny lunch centers. The Board of Education furnishes the equipment, pays the gas bill, and the wages of the cook and the dishwasher. The pennies paid by the children cover the cost of the food material and the Club Women plan to supply the pennies when absolutely necessary. It is very desirable that this should be done without the label of the blue ticket. The Women's Clubs interested in this movement pay for the services of a supervisor who plans the menus and purchases the food. The close buying necessary is shown in the financial statement. One year there was a deficit of six cents and another a cash balance of six cents.

The number of children served daily at each center varies from one hundred fifty to five hundred, depending on the school and in the same school on the weather and the menu for the day. This serving means active work, not only because of the great number of children, but because of limited space and time. Members of the Women's Clubs appear daily at the noon hour and assist with the serving. Their presence is a help in many ways beyond the goodly service rendered.

In January of this year a penny lunch room was opened at the Haines Practice School. The Board of Education furnishes the equipment and pays for service as at the other centers. The teacher in charge of the Household Science in the Haines School has immediate direction of the penny lunches. This means that the work done by the paid supervisor of the other centers is carried here by the regular Household Science teacher, who because of her interest in the plan, has willingly given her time and accepted the additional responsibility.

At the various centers we found special attempts were being made to have the penny lunches sufficiently attractive to compete with the unwholesome wares presented by the street venders. At

the Adams School the Club Women have undertaken the furnishing of a mid-morning and a mid-afternoon luncheon for the children in the subnormal room. The usual good results are already to be noted.

The following sample menus are interesting as they show what is being served for a penny:—

I. Soup:—bean, pea, tomato or spaghetti with two slices of bread.

II. Hot cocoa or cold milk with a sandwich made of two slices of bread with jelly or peanut or fruit butter.

III. Cold milk with two crackers and a tablespoon of raisins or a few dates. Everywhere the favorite menu was the one that included sausage sandwiches.

A cup of cocoa as served costs one-third of a cent. Day old bread is purchased at 2½ cents a loaf and Pasteurized skimmed milk at eight cents a gallon. Each loaf is cut into sixteen slices.

And yet, one penny's worth of this food taken once a day has such an effect on the children that their improvement in health and school work can be noticed.

These results suggest that this is the first department that ought to grow, so that in the near future all children who need it can have this help.

Committee:

IDA M. COOK,

Supervisor Household Arts.

JENNY H. SNOW,

Household Science Teacher.

Chicago Normal College.

CORRECTIVE INSTITUTIONS.

The character building forces which we term "Education" emanate not only from the School, the Home and the Church, but in equal measure from the street and public amusement places; from occupations and companionship. Education may be upward toward good citizenship which means service in community life, or it may be downward to that pitiful degradation which is a threat and a menace. For this reason a city's care of its dependent and delinquent children should be looked upon as a measure for its own safety, a civic duty comparable to that which provides a Fire Department, a Police Department and Department of Health. The expenditure of money for such care should be considered a wise and necessary investment for the public good. If the neglect and indifference of parents is supplemented by neglect and indifference on the part of the city, the case of the children is desperate indeed, and the outlook for the city itself is full of danger. Following is a brief summary of Chicago's provisions for the saving of her delinquent boys and girls. The three civic bodies interested,—the County, the City and the Board of Education have generously overlooked all technical questions of authority and have worked harmoniously for the public good.

Juvenile Court.

Corrective measures provided by the State law for the care and betterment of delinquent children are now administered by the Juvenile Court which was organized fifteen years ago the first of next July, and was the first of its kind ever organized.

It is well to realize the progress we are making provided we continue to move forward. Hence a word as to the former treatment of unfortunate children is not out of place. For countless years laws were made with penalties attached for infraction and the aim of society seemed to be the protection of the laws rather than of the children. Prior to July, 1899, the age of "criminal responsibility" in Illinois was ten years. Prior to 1845 it was seven years. Awaiting trial in Chicago, children were incarcerated in the jail with criminal men and women, a most effective school for crime, and sentences were served in the jail or at the Bridewell. Trials were conducted with all the formalities pertaining to criminal law, judges far removed and awful, grand jury, petit jury, criminal lawyers and all—a terrible array for chil-

CHICAGO PARENTAL SCHOOL.
Foster and North Central Park Avenues

dren to meet. For the year prior to the enactment of the Juvenile Court law—fifteen years ago—more than five hundred juvenile delinquents were committed to the County Jail in Chicago.

The idea that these children were "wards of the State" and as such entitled to the protection and fostering care of the State slowly fought its way into recognition through the splendid efforts of Mrs. Lucy Flower and other noble women of the Chicago Woman's Club. The Juvenile Court was the result. The fundamental principle behind it is that each child brought to the Court is something to be saved to society if possible, and that it is not so much a question of what he has done, as what can be done for him.

In the Juvenile Court all formalities of Court procedure are dispensed with and the Judge draws the children close to him and talks with them familiarly to gain their complete confidence. Richard S. Tuthill, Julian W. Mack and Merritt W. Pinckney will long be remembered with gratitude by the people of Cook County for so successfully having set in motion and conducted this court to the present time. Judge Pinckney is completing his sixth year in the court. He is a lawyer of unusual ability and a man of the finest sensibilities whose sympathies are always with the children. For several years, more than four thousand children have had hearings in the Juvenile Court each year, and one Judge has attended to them all. Although cases were conducted very quietly and ideally as compared with ordinary court procedure, it was felt by Judge Pinckney that another forward step must be taken. An assistant to Judge Pinckney was allowed and fortunately he had the choice of that assistant,—a woman lawyer of long experience, fine ability, and one whose life is devoted to the rescue of unfortunate girls.

Of two thousand seven hundred delinquent children brought into court last year, six hundred fifty were girls. For these girls a separate and distinct court room was established one year ago to which only the parents or guardians are admitted at hearings. The Judge and her stenographer sit at small desks before which the girls stand. There is a row of six chairs *behind* the children so that only one kind-hearted woman looks into their faces.

"What has become of the four thousand two hundred and seventy-nine children brought into the Juvenile Court the past year?" is the vital question which can be answered only in a very general way in these limits. Of these children, two thousand fifty including truants were delinquent boys, six hundred fifty delinquent girls. Of the boys about six hundred fifty were truants or semi-delinquents. The remainder, nearly one thousand six hun-

dred children, were dependents guilty of nothing but poverty and neglect.

Probation.

A large portion of the delinquents are "first offense" cases. These are generally given a chance to make good on promises of both parents and children. Second and even third offenders are frequently given "another chance" and with the others are placed under the care of "Probation Officers" to whom they are obliged to report each week. In case they fail to report, they are brought into Court to give an account of themselves to the judge. Each case is kept in full detail in the records of the court.

There are seventy probation officers, men and women whose full time is given to this work. Judge Pinckney speaks very highly of the faithfulness and effectiveness of these officers. They are expected to know every detail of home conditions and as much of the life history of parents as can be ascertained. They find out how the children spend evenings and try to check practices which may lead to trouble,—all in the most friendly spirit. The officer who can gain the full confidence of children and parents can be of untold service, and there are many such.

"Home Finding" and "Following Up."

Another very important disposition of cases in the Juvenile Court was established by Judge Pinckney nearly four years ago and has now grown into a settled institution. In most cases the homes of delinquent children are so vicious through drunkenness or other immorality or separation of parents that any right conduct on the part of the children is almost out of question. Judge Pinckney has agencies at work finding good homes on farms within fifty miles of Chicago, to which boys may be sent on parole. These boys are seen as often as once each month by friendly visitors, who report progress of boys and conditions of homes. One hundred twenty boys each year have been sent out and from seventy-five to ninety per cent of them have done well. The change wrought in health by fresh air, good food and regular outdoor exercise is remarkable. Whatever wages are earned are spent for the boys' necessities or placed to their credit in banks. The wages run from five to twenty dollars per month and are paid into the custody of the Court. This scheme of Judge Pinckney is purely philanthropic. The expenses connected with placing and following up these boys are borne by generous friends of the Judge. Cook County has not yet reached that stage of wisdom which provides for such work as a civic duty,—but it will in time. Every boy so

sent to a farm, instead of to the John Worthy School, and who makes good would save to the County at least \$300.00 per year, and he may earn from \$100.00 to \$300.00 more. The people engaged in this sort of work must be first class men and women, educated, refined, and of strong and attractive personality. The wards of politicians will not fill the bill. The right sort of people can be secured if they are adequately paid, and only such are good economy.

Detention Home.

On Gilpin place, just east of Halsted street, a building to house the Juvenile Court and Detention Home was dedicated August 7, 1907. The Detention Home is for the housing of delinquent and of dependent children until their cases are disposed of by the Juvenile Court. The building is 109 x 106 feet and three stories high. The building was greatly exploited in the press, but like many other Chicago projects, it proved utterly inadequate. Within three years it was greatly overcrowded and at the end of two more it was unbearable. Later, one-half of the tenth story of the Court House was finished for the use of the Juvenile Court and its various departments, leaving the entire building on Gilpin Place to be remodeled and used as a Detention Home and School.

One year ago the Board of Education completed the acquiring of a lot 125 feet square, south of Detention Home and fronting Forquer street, for a school, and a commodious two story building is nearing completion. The new building, with the south wall of the old one, surrounds a quadrangle 80 feet square, which will give the children at the Detention Home their first opportunity for outdoor exercise. The school rooms and an ample gymnasium are on the first floor, each room having its own toilet facilities, thus rendering proper segregation possible. The second story will be finished as dormitories for boys and for the dependents. There will also be a fine play room for dependents.

It may be explained that the management of the Detention Home is not an easy proposition. The number of inmates and their personnel are constantly changing quantities. They remain in the Home from ten to sixty days—not often longer than thirty days. So any effectiveness in a school will call for the greatest skill on the part of teachers. There are five excellent teachers in the school, which is in operation from nine to four o'clock. A man and a woman teacher of physical culture come an hour each day at four o'clock. There are from seventy-five to one hundred twenty-five children in the Home.

The Board of Education has dealt generously with these unfor-

fortunate children and the coming years will be very different from the past ones for whatever inmates are housed in the Detention Home. The hardest days are Saturday afternoons, Sundays and other holidays. Some adequate provision should be made to make these days pleasant and profitable for the children. One of the teachers might undertake the enterprise as a specialty, if she were paid for it. Or the teachers could take turns on the same terms.

Another feature calling for remedy is the transportation of girls and boys in vans from the Home to their hearings at the Court House—fully one and one-half miles through busy streets, subject to the gaze and comments of idle curiosity. This arrangement cannot last in Chicago. It is intolerable. The future will demand that the Juvenile Court and the Detention Home, with necessary hospital and school, shall be built together on ample lands, far enough from the center of the city to insure fresh air, free recreation and safety from curiosity-seekers. Chicago and Cook County cannot be satisfied with less than this and we commend the same to the authorities of the city and county as matter for thought.

Special Rooms for Truant Boys.

Truants are accounted "delinquents" and the very great majority of them are brought into line by means of two very different agencies. Boys become truants because of restless dispositions, because the work of the school does not interest them, and more than these, because of weak and indifferent parents.

About six years ago, a room at the Jenner School was fitted out with work benches and other facilities for hand work, and with twenty-four desks for study. A strong teacher, who liked boys, was placed in charge and twenty-four boys from a group of schools in the vicinity were placed in her care. Eligibility for membership depended upon habitual truancy or incorrigibility. Cards of admission were furnished by the Judge of the Juvenile Court, and for the first time the boys became conscious of the power of the State to control their actions. They lived at home and were all anxious to return to their own schools, which they could do after several months of approved good behavior. Since that time eleven other such rooms have been established, most of them within the past year or two. The experiment is a great success. While every room is doing good work, some of them are remarkable, returning every boy to his normal school condition. These boys are Parental School cases and the enormous importance of the work appears when we consider that eighty per

SCENE AT CHICAGO PARENTAL SCHOOL.
Foster and North Central Park Avenue.

cent or more of them make good while living at home, and that a great expense is thereby saved to the Board of Education.

Your committee submits the following suggestions:

a. That teachers be trained in this work and always chosen from the best material in the teaching force of the city.

b. That all children be critically examined by the Child Study Department before assignment.

c. Special attention to cleanliness and personal appearance. Frequency of baths in school or at home.

d. Daily exercise in the School Gymnasium—fifteen minutes.

e. That boys have care of cleanliness and arrangement of their school room, especially the windows.

f. Boys to have plants in windows and make them thrifty.

g. Boys to have fifteen minutes for a singing lesson every day, under the best singing teacher in the school. Rote singing of patriotic and folk songs of all nations, and songs to inspire courage in successful living.

Singing was heard in only one class, but that was remarkably good, the boys seeming to enjoy it intensely and singing with great spirit.

Parental School.

The Parental School was opened for boys habitually truant from home or school or both, January 31, 1902, with thirteen boys. It is at Bowmanville, about eight miles from the Court House. There are now one hundred ten acres in the farm, eight cottages for three hundred twenty boys, a fine school building of eight rooms tastefully decorated with pictures and plants, a pleasant assembly hall and an excellent manual training department. In the school are grades two to seven, inclusive, and all, beginning with the fourth grade, spend one hour each day in the shops. In the working season the boys spend one hour each day on the farm, each boy having his own plot of ground and being solely responsible for its cultivation. The farm work is done under the direction of the class teacher and it is well done. The farm is stocked with thirty fine cows, several horses, a lot of pigs, and fifteen hundred chickens. The boys are partially responsible for the care of these animals. The cottages are real homes, each under the care of a man and his wife, and each houses forty boys. These homemakers are as carefully chosen, as are the teachers, and the boys are carefully instructed in whatever of the house work they are capable of learning. Every part of the establishment is scrupulously clean and every boy is made to feel his share of the responsibility of keeping it so. Military drill is given by boy officers under

direction of the family officers. All sports are under careful supervision, baseball and tennis being the favorites, though other games are in evidence, and sportsmanlike conduct is the rule. Every cottage has its own grounds for games. The tables are amply supplied with wholesome food, in which fresh eggs and the best of milk play an abundant part. For the first time in their lives, many of the boys know the luxury of plenty of good food to eat.

In place of bad coffee, cigarettes, cramped and dirty rooms, late hours with street gangs or at "movies", the Parental boy has everything that is conducive to health, including ten hours of sleep every night in his own clean bed, in a perfectly ventilated room. Is it any wonder that the improvement of the boys is marvelous in every way and that eighty to ninety per cent of them make good?

One pleasant feature of the farm is the nursery of several thousand thrifty young shade trees, which will soon be available for planting on Chicago school grounds free of expense to any principals who will see that they are properly planted and cared for. So the Parental School boys may be instrumental in the improvement of all the school premises in Chicago if the "other boys" will lend a hand. It may be added that the all important "follow up" work is thoroughly carried out at the Parental School. Not a boy can get away from his record. The boys remain in the school from six months to a year. Only the recommendation of the Superintendent of the School can release them and they are then under surveillance of the school for another year. They may be kept longer, if necessary. The object of the school is accomplished in fully eighty-five per cent of the cases.

John Worthy School.

The John Worthy School was established about fifteen years ago to provide a home and school for the boys incarcerated in the jail and Bridewell. Before the institution of the State School at St. Charles the John Worthy had become greatly overcrowded, as many as four hundred and fifty boys being inmates at one time. On the opening of the St. Charles School, the number was reduced more than one-half. For the last few years the number has never reached two hundred and has fallen below fifty. At the present time there are seventy-six. During the last year the number has gone as high as one hundred fifty. In age these boys range from twelve to eighteen years. In point of delinquency the range is five times as great.

There are three distinct classes of boys graded according to experience and proficiency in crime. The first class are but little

different from many of the Parental School boys and might have been sent to that school if they had not been fourteen years of age. The second class are of the St. Charles type,—many of them first offenders. They would now be at St. Charles but for lack of room in cottages. The third class are hard boys, well versed in crime, many of whom expect to spend their lives as criminals and to exercise their wits only to evade detection and punishment. To herd these three classes together in school at manual work, in games, in social converse, and in dormitory, is not only lacking in wisdom, but savors of gross negligence.

The present school as compared with what the boys had twenty years ago is admirable and reflects the greatest credit on the noble men and women who strove so faithfully for its establishment. But the John Worthy School is a part of the city prison and as such should not and will not continue.

The Board of Education has nobly done its part in the John Worthy School, and the teachers now at work there are among the best in the city.

During the past two years the authorities of the County, of the City and the Board of Education have striven to establish a school for boys of a grade between the Parental and the St. Charles schools, on a farm at least twenty miles from the city. Legal complications have thus far balked their efforts but the school is so necessary that it will certainly be a reality at no very distant day.

Of the boys usually sent to the John Worthy School, the first division already mentioned would be sent to the new school, the second division either to the new school or to St. Charles. Whether one class or the other, they would be sent on definite sentence, and to be liberated only on making good. They should accomplish definite work. The third division of boys is a most difficult problem. The State institution at Pontiac has capacity for twelve hundred boys, with a present membership of about five hundred. This institution should be so organized as to give instruction that will render the inmates capable of earning a living because they can do something well. Sentence should be in every case, dependent upon the work accomplished and liberation depend upon ability to perform useful work in a creditable manner. This institution should provide for the third class of boys.

More important still, the Pontiac Reformatory should stand in the same relation to the Juvenile Court as does the school at St. Charles. And, *more than this*, the Juvenile Court should have power to change inmates from one institution to another at its discretion.

Delinquent Girls.

The girls and boys in Chicago are about equally divided in number. The delinquent boys brought to the attention of the Juvenile Court each year greatly outnumber the girls—the last year two thousand and fifty-two boys and six hundred and fifty girls. The grounds of complaint are almost entirely different with the sexes and it stands to reason that the treatment of offenders must be different in many essentials.

The adequate treatment of delinquent girls is vastly more difficult than the treatment of boys, so much more difficult that the great difference in numbers is largely counterbalanced.

The question is often asked why a Parental School is not provided for girls the same as for boys, the question being prompted by the splendid success of the boys' school. The answer to the question is very simple. It is because there are practically no persistent truants or incorrigibles among the girls in the Chicago public schools, or in any other public schools for that matter. Hence, there is no demand for schools on the Parental basis for girls.

A comparison of what is done by Chicago and Cook County for the two classes of delinquent children divided on a sex basis will furnish startling matter for thought and for question of justice, of Christianity, of humanity, of even the elements of Civic wisdom.

Each of the twelve truant rooms in the elementary schools provides for twenty-four boys. The ordinary rooms provide for forty-five to forty-eight each, so that the cost of schooling these boys is doubled.

The difference per year is at least.....	\$ 8,000.00
The Parental School buildings and grounds including the land under acquisition, 110 acres all told, are easily worth	525,000.00
Parental School yearly maintenance.....	90,000.00
The present John Worthy building and land are worth at least	100,000.00
The entire annual maintenance is about.....	60,000.00

The services of the Juvenile Court in all of its activities including the Detention Home are shared by boys and girls, but here again the boys get the "lion's share" because of numbers.

In the expenditure of the City and County for delinquents, what is the exclusive showing for the girls?

We look in vain in Chicago and Cook County for any appropri-

SCENE AT CHICAGO PARENTAL SCHOOL.
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ation of taxes for the saving of young girls who have gone wrong as evidenced by any tax supported institution. That we do not want the same sort of homes and schools provided for boys—and we do not—cuts no figure in the case.

There is desperate need of something to match up the hundreds of thousands so generously and so justly spent for the boys, and of a great splendid effort to save the savable girls.

"Why not send them to Geneva?" is an oft heard question. Many are sent there but institutional life for girls cannot be made so successful as for boys. The variety of activities at the Parental School and St. Charles, whether of work or of play, cannot be matched in any institution for girls. At any rate they never have been in Illinois. Big institutions are not wanted anyway. The problem for girls must be solved some other way.

While the private institutions established in the city for unfortunate girls agree as to the need for training head and hand there are marked differences as to how to reach the heart. In one case the aim is through personal human touch; in another dependence is placed on religious training. None seem to have found it possible to reach the most serious cases, because they cannot be handled as individuals. Girls of this type do not readily respond to the group plan of salvation.

Almost all of the six hundred and fifty girls who have come before Judge Bartelme are sexually immoral. Their ages range from ten to eighteen years. Many of them, indeed most of them, are not very bad girls. They are victims of conditions in vicious homes caused by poverty and dissipation and neglect of parents. There is also an irresistible craving for fun and excitement, for play and amusements which are so amply provided in good homes. Skating rinks, "movies," dance halls, motorcycles, late hours in crowded streets where scoundrels in guise of men and boys are always in waiting,—these are the dangers which bring trouble upon girls.

Then to add to the difficulty there is the double standard of morality set up by society, including the churches, and maintained for countless generations.

Boys "sow their wild oats" until they are sick of them and then they are forgiven by society, including the churches, and become laudable citizens. But along their paths may be the wrecks of girls whom society, including the churches, never forgives, lives hopelessly blasted, never even permitted in respectable homes, much less capable of making them.

It is a strange comment on human nature that women forgive men and condone any kind of living, but women do not forgive

women. In this work for girls, they will have to change front and help, because if these girls are to be saved, women alone can save them.

Of the six hundred fifty delinquent girls, two hundred eighty-four were paroled to their parents and the Probation officers. Many of the parents need quite as much attention from the officers as do the girls. The parents do not know how to treat them nor do they realize what the girls need. Only high class cultivated women of keen and tender sensibilities are making competent Probation officers.

The most striking work done by the girls' court in its year's service has been the finding of homes for unfortunate girls directly from the court. It has placed one hundred forty of them with people who fully understand the need and who wish to help. No greater service for humanity has ever been rendered in this city. Whatever service is rendered by the girls is paid for and many of them have savings accounts at banks. Homes that are willing to take the girls are carefully investigated and the girls placed in them are frequently visited by kind and sympathetic women who advise them and seek to strengthen them in good conduct. This scheme for delinquent girls is like that for delinquent boys. The County treats both alike and allows the placing to be done through charitable sources.

The pressing need asked for by the girls' court is a small house or an eight or nine room apartment centrally located, to which the girls could go to put their clothing in order and properly prepare to start out in the families in which they are to be placed. The first impression made by a girl in her new home will often be lasting and may determine her future usefulness. If she can enter the family with a neat suit case containing a clean shirt waist, underwear neatly darned and other necessary clothing, instead of a newspaper bundle, she could make the new start more respected and self respecting than is now possible. This house or apartment would always be the home of the girl on her holidays or when out of employment.

A house or an apartment is a very modest request. To ask for one in each section of the city would still be very modest. A thoroughly equipped training school to match the new school for boys, and like that placed some distance from the city would be most reasonable; a school for teaching girls how to work and how to do a great variety of things well that people are willing to pay for; a station between the Court and the homes that will await the girls when properly prepared and which shall be known only as a school and a part of our educational system. Such a

school is possible but it must be entirely a Board of Education enterprise.

The Superintendent of Schools and the Judge of the Girls' Court should choose the woman to plan the new school and to organize it, and they should be free to seek her in any part of the United States. She should have absolute control in management and in choice of teachers, matrons and helpers.

If the woman is great enough, and a woman so selected would be, the plan will succeed and the girls with rare exceptions will be saved to society and the State.

Are there such schools? Very few, because this great, rich country has not yet come to a realization of the gravity of this girl problem and of the economy of solving it right. First, preparation for homes; second, homes for the unfortunate girls.

Money? Of course, it will cost money, but remember that Chicago girls have placed to their credit in the Board of Education \$100,000 each year for several years simply by not being truants. Truant boys alone are costing that amount annually besides a half million dollar plant. An equal expenditure for unfortunate girls would certainly be within reason and justice. The neglect of these girls may be and will be attended with consequences most appalling, not the less so because kept under cover and little understood. The great difficulty in stimulating a willingness and determination in the delinquent girl to earn her right to respectability and freedom lies in the fact that there is so little ahead for her socially. The all important question is will fortunate people—Christian people—who have good homes, lend a hand and open their homes to save children who have none, children who have sinned, to be sure, but who are often not very guilty. Remember ye who believe the New Testament and profess to follow its teachings, that of the two women who mourned at the sepulcher of Jesus Christ, one was Mary Magdalene.

ORVILLE T. BRIGHT, *Chairman.*

NELLIE H. CHENEY,

Head Asst., Auburn Park School.

ELLA R. CONNELL,

Principal, Gray School.

FLORENCE DENEEN,

Head Asst., Altgeld School.

ESTHER E. MORGAN,

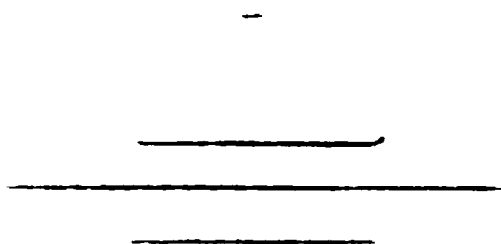
Principal, Waters School.

WILLIAM B. OWEN,

Prin., Chicago Teachers College.

MOLLY MCG. PATCHELL,

Head Asst., Moseley School.



**REPORTS OF SCHOOLS AND ORGANIZATIONS NOT INCLUDED
IN THE SURVEY.**

Vacation Schools.....	John D. Shoop.
Social Centers.....	John D. Shoop.
Evening Schools.....	William M. Roberts.
Compulsory Education.....	William L. Bodine.

VACATION SCHOOLS.

The Chicago Vacation Schools opened for the summer session of 1913 on July 7, for a term of six weeks. Twenty-one regular schools were maintained. In six of these schools classes for children who had been retarded in the grammar grades were conducted. The average attendance for the term was 10734, and the total number of teachers employed, including cadets, 387.

Following the plan of the previous year the sessions were limited to four days of the week. Although the reduction in the number of days of session was originated as an economic measure, the results have been satisfactory in that the week-end vacation is lengthened and the stress of labor during the warmer portion of the year reduced. There is however a growing interest manifested by the public at large in the continuity of the work in the regular grades that may in time render it advisable to modify the plan in harmony with the best interests of the system.

Review Schools.

The attendance in the classes opened for review of grammar grade studies has been gratifying. In many instances pupils have been advanced in the grades as a result of their application in these classes. The vacation school receives these pupils only on the recommendation of the principal of the school regularly attended through the year and promotion conditioned on the result of their studies in the vacation schools is entirely at the option of the regular principal. To the present time the end to be attained in these classes has been to supply deficiencies in the grade work which arise in the school experience of the pupil, and which are traceable to loss of time or other obstructive conditions over which the pupil may have no control. The response of the public to these review schools indicates that a large number of children will be enrolled if the schools can be located at places within a reasonable distance of the homes.

Out-Door Schools.

Through the co-operation of the school extension department of the Chicago Woman's Club, and the generous assistance of the Elizabeth McCormick Memorial Fund a number of out-door schools for anaemic children have been maintained. Hours of restful sleep,

nutritious diet, recreational occupation, baths, sunlight and fresh air are the elements that have been brought into helpful relations in order to create means to stimulate the physical vitality of these children. Representatives of the Chicago Tuberculosis Institute acted in the capacity of medical advisers, from whom the children received watchful care. Representatives of the Woman's Club provided and directed the preparation of the food supplies, while the Board of Education purchased the necessary physical equipment and paid the salaries of teachers in charge. It has been possible to determine the results of these schools in tangible measurements and the higher tide of vitality which as a result of this care feeds the life current of these children offers sufficient guarantee of the wisdom of the public expenditure permitted in their behalf. The general interest now apparent in the mind of the public looking toward the creation of child-saving agencies encourages the school authorities to continue this co-operative work in behalf of these school children who have less than an average chance in the struggle for the perpetuity of life.

Deaf and Crippled Children.

In harmony with usual custom schools for the deaf were maintained at the Parker Practice and at the Smyth Schools.

At the Spaulding and Fallon Schools the crippled children were generously provided for. In each of these schools care was taken to provide as much out-door life as possible. The excursion features to parks and playgrounds added to the enjoyment of these children.

Special Features.

At the Kinzie School, playground direction was provided through the efforts of the Parents' Organization. The Juvenile Protective League also contributed the necessary funds for opening the playground at the Adams School. At the Fisk School a library room was maintained by the Woodlawn Civic League for the distribution of books loaned from the Public Library.

The Teaching Corps.

Selections of teachers for vacation schools are made on the basis of merit. The general standard of instruction and leadership is high in the scale of efficiency. In no other department of the educational service is the salary scale so low. As this department has passed through the experimental stage full consideration should be given to the requests of the teachers for a reasonable

advance on the salary schedule. The work is arduous and the temperature of the season more or less oppressive. The dignity of the work should relieve it from all semblance of charity or philanthropy. For these reasons the claim set forth by principals and teachers is I believe reasonable and just.

Co-operation.

The enlargement of playground areas of the schools suggests the feasibility of closer co-operation with the Park and Municipal Play Grounds. If it be possible to effect an adjustment as to time and expense of operation, the Vacation Schools and the Playgrounds Associations can easily supplement each the work of the other, and provide thereby an equitable distribution of the privileges of these essential factors in providing for the restless life of the child. A sympathetic comparison and survey of these two fields of action will reveal much that is of a common purpose and which intelligently correlated would add to their general efficiency.

Extension of Activities.

The Vacation Schools came into existence at a period when the introduction of manual work as a part of the regular school program was in its infancy. These schools at that time assumed something of the nature of experimental stations in which there was a trying out of the new order in education. In this respect alone they have rendered valuable service to the system at large. What was then an innovation in the traditional processes of education is now a recognized necessity in every well-balanced curriculum. There are still many suggestive lines that may be followed in the Vacation Schools that will supplement and add to the range of action of the regular schools.

Out-door study for which the season offers exceptional opportunities is growing in favor. Excursions for observation and information as well as for recreation are becoming frequent as a feature of class work. The mass excursion is giving way to explorations by the smaller group under direction of competent and enthusiastic leaders. The opportunity for working the environment of the schools impresses itself more vividly with each recurring session and the tone of the school takes on renewed life as new agencies for instruction are discovered in the field of every day experience.

It has been the effort of the principals and teachers to adjust the program of each day to a rational division for both instruction

and recreation. The problem has been to avoid monotony in either work or play.

In two of the schools, the Jackson and Talcott, the scope of instruction extended to the observation and study of machinery of common use. Through the courtesy of Mr. Harold F. McCormick gasoline engines of small but complete type were placed at the disposal of the two schools. With these as a point of beginning investigation extended through various lines of application of engine power with the results of developing in these boys a more intelligent appreciation of the nature and value of machines and motive power. The thought will doubtless find a more extended application in the future progress of the Vacation School policies.

The Future.

It has been the belief of those who have given time and attention to the Vacation School movement that the tendency of the times in the Educational world points to a closer and more vital relation of these schools to the general system. An extension of time and course of study is counted among the future possibilities. Out of this plan would come the opportunity for advanced study in the regular Elementary Course and a resultant saving in time to many students whom the press of circumstances impels to constant effort in completing their elementary education.

JOHN D. SHOOP,
First Assistant Superintendent of Schools.

SOCIAL CENTERS.

The Social Center movement as a feature and function of the Public School System of Chicago has closed the fourth year of its existence. From an initial and experimental venture which permitted the opening of ten buildings for a limited portion of the winter term of school, the system has grown to more stalwart proportions and has vindicated its right to permanent recognition as an essential and legitimate function of public education. In enlarging the scope of public school activities to include provisions for the social life of the young the Board of Education has been loyally supported by the public at large. In many instances local interest has reached the stage of material assistance. Neighborhood organizations have lent their aid in providing attendants, instructors, and equipment that have made possible the enlargement of the scope of the work.

Credit and honor are due to The Juvenile Protective League, The Boy Scouts and Camp Fire Organizations, The Chicago Woman's Aid Society, and various neighborhood organizations, for the untiring zeal which they have shown in supplementing the contribution made by the Board of Education for social work and in multiplying the possibilities of the public school as an administrative aid to the recreational needs of community life.

The period of social center activities for the term now closing covered one half of the school year, opening on November 17. The original plan of limiting the sessions to two evenings of the week has been continued. These limitations are the outgrowth of a belief that the public in its provisions for the recreational demands of youth, should not encroach upon the rightful province and essential duty of other social institutions. The religious instinct should be cultivated and the church should insist on its rightful share of the period of time which follows the usual hours of employment. The domestic tie is the most sacred and in every adjustment of social life the home must have priority of claim. From the hearthstone and the sanctuary there should be no defection. The spirit of the social center restricts itself to that field which ministers to the gregarious impulse and offers its guardianship as an agency for protection to the youth against those influences which in social life tend toward the destruction of innocence and morality.

It is in the interest of the maintenance of a rational and

well-balanced apportionment of the leisure time of the young that the Social Center confines its offices to the time and the field indicated.

Individuality of Centers.

A brief experience in directing the organization of a Social Center System reveals the necessity for a liberal autonomy in the management of the individual center. To effect a sympathetic and co-operative relation with the social impulses representative of the youth in a community, conditions both racial and domestic must be carefully considered. Customs long established are factors in determining a program for the recreational activities of any class or race of people. It has been the purpose and the practice of the principals in charge of the centers to study carefully the conditions of the neighborhood and to shape the policy of management so far as may be practicable in harmony with the social tone of the community life. This condition is essentially true in a city cosmopolitan in character. There is an inherent and abiding interest in the exercises and recreation that are national and traditional in the history of a race. These have been given due consideration in the plans for the local field. It may be of interest here to cite the loyalty and helpfulness of the "advance guard" of those of foreign birth to the more recent arrivals from their native country. The co-operation of scores of willing workers who have established themselves as residents and citizens of their adopted country has been of invaluable assistance in the work of the Social Center.

Features of special local interest in certain Centers have been lectures, usually illustrated, on the principles and prerogatives of American citizenship. They have been delivered in many instances in the native tongue and have been alike attractive to youth and adult. The illustrated lecture on various subjects has been frequent in the programs offered and has proved to be a helpful factor in creating and maintaining a broader and more permanent basis for interest in the work.

Interchange of Attractions.

A feature that has been helpful in promoting the general interest is the interchange among the different organizations of musical and dramatic attractions. Groups of young people from one locality would visit other centers and provide entertainment for the evening. In many instances productions of unusual merit were staged and standards were established that served as stimuli to more successful effort. In this plan there has been the ad-

ditional merit of larger co-operation and acquaintance with the general scope of Social Center interests.

Saturday Evening Center.

At the Smyth Social Center, through the patronage and support of the Chicago Woman's Aid the halls of the building were opened on Saturday evenings for a portion of the winter term. Situated in close proximity to the usual public places of amusement on the street the organization was in position to test its attractive qualities. The results have been highly gratifying and prove the need of public aid in meeting the social requirements of the young in the congested portions of the City. A visit to one of these Saturday Evening Social functions would be an object lesson for all who question the value of the Social Center as a moral force in community life.

Domestic Factor.

At a few of the Centers certain features have developed into a series of social-domestic assemblies at which mothers receive instruction relative to the duties of the household, in addition to the hour given over to social functions. In many instances the children accompany the mothers. The cutting, fitting and sewing of wearing apparel for the children give a suggestion of a return to the earlier and less formal social meetings of mothers. Expert advisors were provided and the unconventional atmosphere which permeated the group offered testimony to the value of these meetings to the homes that were represented. It is at such assemblies that the problems of the home find encouraging assistance and the routine of domestic duty is afforded helpful measures of relief. In such gatherings there is developed the essentials of economic as well as social co-operation, a combination which is conducive to mutual strength and increased efficiency.

There is still a large field of opportunity for the extension and amplification of the Social Center organization. The assembling of the factors and features of neighborhood recreation in the public school as a center is a process of education and evolution. It is a problem which involves the modification of building plans and the adjustment of physical conditions in the class-room to meet the double purpose which they are to serve. Movable desks and modified plans for heating and lighting the rooms are economic necessities. The organization of clubs and societies to operate under self-control is a plan susceptible of enlargement. The extension of the system to include the frequent use of the large assembly

halls in the high schools presents another line of possibilities. With the growth of popular sentiment behind the Social Center movement the wider sphere of public service which our school buildings may render to the people of the city seems nearer the point of realization.

In closing I wish to bear testimony to the earnest and faithful service of the principals and teachers who have labored zealously to assist in the solution of the social problems of the community. Undaunted by discouraging situations they have met every difficulty with hopeful and cheerful spirit. To this efficient body of co-workers honor is due for whatever of success may have attended the efforts of this department of the Public School System.

JOHN D. SHOOP,
First Assistant Superintendent of Schools.

EVENING SCHOOLS, 1913-1914.

The term which closed on March 13, 1914, was the most remarkable in the history of the Chicago Public Evening Schools. Early in September it became apparent, from the great number of requests received for information about the evening schools, that there was an unusual interest in the subject. Accordingly means were taken to spread information concerning the courses offered, through the press, through the pupils of the day schools, and by means of printed circulars and posters furnished to department stores, mail order houses, factories, foreign language newspapers, railroad shops, etc. In spite of these endeavors to give as great publicity as possible, in English as well as in many of the foreign languages, the office was still besieged, by mail and by telephone, for information up to and after the date for opening the schools.

The attendance during the first four weeks was about 16 per cent greater than during the corresponding weeks of 1912, but the astonishing thing is that the total enrollment was 31 per cent greater and the actual average attendance for the entire term of 20 weeks was 26 per cent greater than for the entire term of 1912-13, leaving out of the account the enrollment and attendance in four new schools opened.

The following table will give a comparison between 1912-13 and 1913-14:

Enrollment.

(Pupils are not enrolled until they have attended eight evenings.)
High School Classes.

	Men	Women	Total	Increase %
1912-13	6254	4181	10435	....
1913-14	7513	5125	12638	....
Increase	1259	944	2203	31%

Elementary and Foreign Classes.

	Men	Women	Total	Increase %
1912-13	12518	5034	17552	....
1913-14	18014	7362	25376	....
Increase	5496	2328	7824	44%

*Leaving out the enrollment in the four new schools the increase in elementary classes was 87%.

Total Enrollment—High and Elementary.

	Men	Women	Total	Increase %
1912-13	18772	9215	27987	....
1913-14	25527	12487	38014	....
Increase	6755	3272	10027	36%

Leaving out the four new schools the increase was 31%.

It should be noted, that in 1912-13 pupils were not counted as enrolled until they had attended ten evenings, which was the equivalent of two weeks' attendance when schools were in session five evenings each week. During 1913-14 this was changed to eight evenings, the equivalent of two weeks' attendance for four evenings each week. No doubt a part of the apparent enormous increase is due to this change in method of enrollment. But when we examine the figures showing the average attendance for each evening of the term the real increase in attendance can be seen:

Average Nightly Attendance for the Term.**High School Classes.**

	Men	Women	Total	Increase %
1912-13	3242.8	1943.1	5185.9	....
1913-14	4143.4	2328.7	6472.1	....
Increase	900.6	385.6	1286.2	25%

Elementary and Foreign Classes.

	Men	Women	Total	Increase %
1912-13	7082.6	2501.1	9583.6	....
1913-14	9261.1	3290.2	12551.3	....
Increase	2178.6	789.1	2967.7	31%

Leaving out the attendance of the four new schools (466) the increase in elementary and foreign classes was 26%. The new schools have no high school pupils.

Average Nightly Attendance—High and Elementary.

	Men	Women	Total	Increase %
1912-13	10325.3	4444.2	14769.5	....
1913-14	13404.5	5618.9	19023.4	....
Increase	3079.2	1174.7	4254.9	29%

Leaving out the attendance of the four new schools, the increase was 26%.

This increase of 29 per cent in average attendance necessarily caused an increase in expenditures, but the cost of conducting the

evening schools was only 17 per cent greater than in 1912-13, or \$218,134.13 as compared with \$186,064.09.

Classes in English for Foreign-Born.

The greater portion of the increase in attendance was in the classes for immigrants, who enter the evening schools to learn the English language. There were enrolled in these classes 16,774 persons as compared with 11,201 in the previous term. Leaving out of the count the 820 enrolled in these classes in the four new schools, the increase was 49 per cent.

It will be interesting to note the nationalities which furnished the larger portion of the increase in the classes for foreigners. No doubt the figures given here will indicate roughly the percentage of increase in number of foreign-born who came to Chicago in the year between March, 1913, and March, 1914. The following table will show the increases by nationalities:

Nationalities Enrolled in Greatest Number in Classes for Immigrants.

	1912-13	1913-14	Increase	Increase %
Russians	3162	5086	2924	90%
Polish	1634	2895	1261	70%
German	1403	1950	543	38%
Italian	1307	2085	778	59%
Bohemian	1036	1442	407	39%
Swedish	309	994	135	22%
Austrian	534	897	313	54%
Lithuanian	569	904	335	59%
Greek	417	619	202	50%
Hungarian	403	579	171	42%
Norwegian	239	375	136	57%
*Totals	11573	17327	7254	63%

*The totals include some who entered cooking, sewing and grade classes.

In addition to these, about 400 more came from other North European countries than during the previous year. There was no increase from the other South European countries, from Asia or the American countries. The opening of one of the new evening schools in a congested district of Russian Jews accounts for about 500 of the 2924 increase in enrollment shown in that nationality.

The immigrants who come to Chicago to live immediately on their arrival in the United States, or who are sojourning in Chicago during the winter season, during their first year in this country or the one following, usually enter the evening schools as soon as possible after their arrival, to learn something of the English language. Some leave after they have purchased their

reading books. Having a fair education in their own language, they try the plan of studying the book at home, improving their opportunities on the street, at work, or when trading at stores, to pick up English words and phrases and to make use of what they learn from the book. While that is not the best way to learn English, it is not an uncommon one for newly arrived immigrants. Those who remain in the classes long enough to be enrolled, attend, on the average, about one-half of the term of 80 evenings. The total number of these for the term just closed, as has been said, was 16,744.

Of these, only one in four is a woman. The proportion of women who immigrate is greater than that, but they do not feel the same necessity for learning English as do the men. In thickly settled foreign districts in Chicago the women who remain at home to keep house seldom find it so necessary to learn English as the husband or father, and the grown sons and daughters, who work under English speaking employers, and spend most of the working day within hearing of the American tongue. These find English an economic necessity. Besides, the father and son are preparing for the time when their applications for complete citizenship will be made.

The nationalities differ in this respect. Very few Italian or Greek women are found in the evening school classes; no Spanish women; very few Bulgarian, Turkish, Armenian, or Croatian women. In all of these cases, except in case of the Italians, the explanation is that few women of these nationalities come to Chicago.

Of the Norwegians, in these classes about one-third are women and girls; of the Russian Jews, about one-third; of the Germans, three in every ten; of the Bohemians, Hungarians, Swedish, about one in four; of the Austrians and Polish, one in five; of Lithuanians, one in eight; of Italians, one in twenty is a woman.

The magnitude of the work of teaching English to foreign-born is not generally realized. Some publicity is usually given to the naturalization of a few hundreds of foreign-born who have made some special preparation for their final papers in evening classes conducted at the social settlements and by the Y. M. C. A. Such work is of course to be commended, but the men who participate have been in this country five years. If they have lived in Chicago during that time they have spent from one to three winter sessions in the public evening schools, and have a foundation of English on which the special instruction can be built. Dur-

ing their evening school study they have read several books on the geography of the country, two or more brief histories of the United States, such as are written for young people, and have gone over, in the course of their formal lessons in English, a great deal of material relating to local governmental activities with which they come into contact daily. In other words, they have a foundation on which the special information necessary for satisfying the court's examination can be built. Besides, they have been learning, through their reading and from the teacher, a good deal of American life and American ideals, and of the duties and responsibilities of American citizenship. It requires only a brief call on an evening school class to convince any visitor that the process of making American citizens is in full operation. The preparation for the formal taking out of papers, for which a brief specific preparation, covering a limited range of ideas is necessary, is insignificant when compared to the larger work of the evening schools with the foreigners.

Increases in Other Classes.

Next to the foreign classes the largest increases were shown in the classes for elementary grade work, where the gain was 1190 or 30 per cent over the year before (247 of these from the four new schools); and in elementary classes in household work for girls (cooking, sewing and millinery), where the increase was 821, or 64 per cent (189 of these were enrolled in the four new schools). The increases in high school enrollment were in household work (sewing, dressmaking, millinery, cooking), where the increase was 480, or 36 per cent; in mechanical drawing, shop work, and electricity, where the increase was 659; and in regular high school studies (mathematics, English, modern languages, etc.), where the increase was 401, or 30 per cent. Four new subjects, agriculture, printing, telephony and classes in civics for women added 391 to the high school enrollment. Outside of classes for immigrants, and not counting the new schools, the enrollment in elementary classes increased 27 per cent while the high school enrollment increased 21 per cent.

Elementary Grade Work.

Reference has already been made to the increase in elementary grade work. An important part of this work is the study of the subjects which lead to graduation from the eighth grade course. At the close of the term the principals recommended for graduation 543 pupils under 21 years of age and 103, 21 years of age

and over, a total of 646. These were awarded diplomas of graduation. This is an increase of 57 over last year. In ages they were distributed as follows: 14 years, 25; 15 years, 132; 16 years, 163; 17 years, 110; 18 years, 55; 19 years, 31; 20 years, 26; 21 years, 23; 22 years, 12; 23 years, 14; 24 years, 5; 25 to 30 years, 35; over 30 years, 24.

It is not difficult to understand why an ambitious boy or girl will work to get the evening school eighth grade diploma. In most cases it is because of a hope of getting into the high school, or because possession of the diploma helps a little in securing a higher grade of employment. In some cases it is the accomplishment of an ambition set by a child some years before when he was in the grammar school, but which could not be attained because economic necessity forced him out of school. The case is different with the adult men and women. These people are trying to make up their deficiencies in that ordinary, common knowledge of arithmetic, English, history of the United States, and geography, together with the ability to write, which is thought to be the necessary equipment of every citizen. They frankly confess their needs, ask for help, and pursue the work with a seriousness and closeness of application which bring gratifying results. The award of the diploma marks an epoch in their lives. They no longer class themselves among the ignorant, as they had done before.

The 103 persons over 21 who attained the eighth grade diploma were not all of those over 21 who sought to remedy the defects in their elementary education. Of the 5105 who pursued elementary grade work about 800 were over the age of 21 years.

The number taking high school work for credits, looking toward an evening school diploma, increased about 25 per cent. The number of evening high school diplomas issued at the close of the term was 60.

Vocational Classes.

Reference has been made in previous annual reports to the increasing interest in vocational subjects. The term just closed showed that the interest is still on the increase, for the number of persons attending classes having a distinct vocational purpose increased about 20 per cent over the previous term. The number in attendance upon these classes is given in detail in one of the tables accompanying this report.

Elementary Courses of Study.

Committees of the evening school principals were organized

for the purpose of studying and reporting upon the various branches taught in the elementary evening schools, including the teaching of English to foreigners. These committees made recommendations as to the scope and content of the courses in English for foreigners, English for elementary pupils, arithmetic, history, geography, sewing, and cooking. Copies of their recommendations and suggestions were furnished to all of the principals, who quite generally made use of the outlines as the course for their schools. With some changes, it would be well to recommend their adoption as a tentative course for the elementary evening schools for the next school year.

Respectfully submitted,

W. M. ROBERTS,

District Superintendent.

ANNUAL REPORT OF THE SUPERINTENDENT OF COMPULSORY EDUCATION.

CHICAGO, August 5, 1914.

To Mrs. Ella Flagg Young, Superintendent of Schools:

In submitting the report of the work accomplished by the Bureau of Compulsory Education for the school year 1913-1914 it is my official pleasure to show a decrease in truancy at both public and private schools to less than one per cent of the enrollment of both; a decrease in habitual truancy and repetitions; a decrease in irregular attendance and in absences due to truancy and in the number of individual truants of both sexes.

The department directed its attention particularly to the work of stopping the growth of truancy among girls, with the result that there were only 158 girl truants reported during the entire year.

With a public school enrollment of approximately 332,248, and a private school enrollment of 114,000—a total of 446,248 children enrolled in Chicago—and the city's pace of population, increasing with progressive strides every year, truancy has been appreciably decreased and attendance materially promoted.

Work of the Truant Officers.

During the school year the fifty-three truant officers covered a territory of 190 square miles within the corporate limits of Chicago. They gave attendance service to 296 public schools and 200 private schools—a total of 496 schools. They investigated the cause of temporary absences in addition to correcting truancy. The absences due to truancy were 4,783, including repetitions, representing 3,399 individual truants.

The departmental policy is to check irregular attendance and the first lapses before truancy develops, and to check first offenders in truancy before they become habitual truants.

The number of routine temporary absences (not truancies) investigated, including repetitions, were 58,064. Of this number, representing those available for return, 46,769 were from the public schools and 11,295 from private schools. The truant officers made 30,441 calls at schools, compared with 26,813 calls the preceding year, showing more frequent visitation made possible by improved attendance conditions and shorter lists of absentees to investigate.

In court work the officers served 705 notices in Parental School cases; 439 warnings on parents in cases that were developing for the attention of the Juvenile Court; and served 1,230 warning notices on indifferent parents (compared with 1,611 the preceding year), in instances where parents would be liable to prosecution in the Municipal Court and fined under the compulsory education law. Public knowledge of the inevitable enforcement of that law if warnings fail accounts for the prompt compliance with truant officers' warnings. This obviated many prosecutions.

The administrative policy is to first give parents every opportunity to correct irregular attendance, truancy or misconduct of their own children, and when they fail to do so the aid of the court is invoked as a last resort.

Boys are not always committed to the Parental School when taken into the Juvenile Court. In 386 instances they were released on probation and truant officers kept in close touch with their attendance to co-operate in order that probation was not violated by a recurrence of truancy.

Truant Officers also investigated 1,325 transfers; conducted 1,808 special investigations; co-operated with charity organizations for the relief of 501 destitute families; warned 209 destructive agencies; investigated 378 parole cases and enrolled 952 children in school who had not been enrolled.

Prosecutions.

In the Juvenile Court, on Friday mornings, when the docket is reserved for school cases of habitual truancy and persistent violation of the rules of the public schools, the regular organization of this department takes before the Judge of the Juvenile Court cases where the juvenile is the offender, in which cases the parents have first been given an opportunity to correct the lapse in attendance or misconduct of their children, and where, in most instances, paternalism of the home failed. The Court and commitment to the Parental School is the last resort. Judge Merritt W. Pinckney has proved himself to be a man of heart as well as a man of law and justice, and his co-operation, together with the efficient administration of P. A. Mortenson, Superintendent of the Parental School, have been material factors in sustaining the diligent work of truant officers. The total number of cases taken into the Juvenile Court by this department during the past school year were 826, of which 424 were committed to the Parental School. Of the remainder, 386 were either released on probation or continued generally pending good behavior; 14 were transferred

to the dependent docket and 2 were dismissed. Of the 439 other warnings served on parents, many parents successfully obviated future complaints.

In the Municipal Courts it was necessary to prosecute only 67 parents under the compulsory education law, of 1,236 complaints in which warning notices were served by truant officers. In instances where warnings are not heeded, prosecutions promptly follow. The previous year, 1,611 warnings were served. The decrease of 375 during the past year was due largely to public respect for the enforced law on school attendance and the knowledge that truant officers' warnings must be heeded.

Transportation of Crippled Children.

The transportation division of the bureau had 12 buses in commission to provide for the pupils who attended the two special centers for crippled children,—the Spalding and the Fallon schools. Nine buses are in the West and the Northwest and North Side service at the Spalding school, and 3 care for South Side children at the Fallon school. In the Spalding circuit 126 are listed passengers, and in the Fallon circuit 44 others are provided for. The buses are manned by sympathetic and efficient policemen detailed, by courtesy of Mayor Carter H. Harrison and General Superintendent of Police, James Gleason, to this bureau. The education and transportation of crippled children is one of the most practical and progressive features of the humane activities of the Chicago public schools.

"Safety First" is the policy of the transportation division, and not a child has been killed or seriously injured during the fourteen years the Board of Education has operated free transportation service to crippled children, who otherwise would be unable to attend school.

Chicago was the first city in the United States to add free transportation of crippled children to its public school system. Boston has long cared for the child on the crutch, but transportation was provided by private subscription.

Police Division.

Police officers, in addition to serving warrants for the department cases in the Municipal Courts, responded to 336 emergency calls at schools; conducted 631 special investigations; looked after 125 paroled boys from the Parental School; took 83 boys to the Juvenile Detention Home and returned 23 boys to the Parental School, including those who escaped. They investigated 104 pool rooms and nickel theatres, etc., near schools;

took 38 truants out of arcades; warned 39 newsmen; investigated 116 child labor cases for final reference to factory inspectors; arrested men charged with crimes against children.

Statistical Research Division.

The statistical division has compiled important data in detail on the questions of immigration, industrial children and age and school certificates, vocational and wage statistics and other features auxiliary to child welfare work.

Census Division.

The School Census of 1914 was taken in May, showing the total population of Chicago, together with name, address, age, sex and nationality of residents; an enumeration of minors in age groups; a count of illiterates over 12 and under 21; the deaf and dumb, blind, crippled, epileptic and sub-normal. The census report in detail will be filed separately.

Individual Truants.

The number of individual truants in Chicago during the past school year was 3,399, as compared with 3,787 the previous year—a decrease of 388. Of the individual truants, 3,241 were boys, as compared with 3,577 boys the preceding year and 158 were girls, as compared with 210 girls for the year previous. Of the 3,399 individual truants, 2,619 came from public schools and 780 from private schools.

Of the 3,399 individual truants of the entire two large educational systems of the city, only 1,350 boys and 34 girls—a total of 1,384 repeated the offense of truancy after the case was referred to truant officers. The previous year, of 3,787 individual truants there were 1,433 repeaters, showing an appreciable decrease in repetitions during the past year, notwithstanding the great growth of enrollment and territory.

Homes from Which They Came.

Of the total number of 3,399 truants in Chicago, 729 boys and 36 girls came from "Good" homes and 1,530 boys and 52 girls from "Fair" homes, as compared with 982 boys and 70 girls from homes of bad environment and insanitary conditions.

This seems to indicate that while environment is a great factor as the cause of truancy, there is necessity for greater discipline and more watchfulness upon the part of the parents in the better homes, where the spirit of youth seems to be breaking away

from the safeguards of home and school. While truant officers can secure attendance of these children at school, they cannot regulate their conduct outside of school hours, and it is the plain duty of fathers and mothers to protect their children's interests and keep close vigilance over their whereabouts outside of school hours.

There was less truancy on the North Side than in any division of the city. The most truancy prevailed in sections of the West Side and a few parts of the South Side.

Age and Grade Classification of Truants.

In the classification of ages of 3,399 individual truants of the public and private school systems of Chicago, it was found that truancy develops most between the ages of 10 and 13 in both sexes. Of the 3,241 boy truants, 731 were 13 years old, compared with 33 girls 13 years of age. The same parallel exists in the second highest number—648 boys were 12 years of age, compared with 24 girls of that age. In the minimum, 6 boys 6 years of age compared with 3 girls of the same age—little first-offenders—were promptly checked. In this class of the early age of truancy, 109 boys and 5 girls were 7 years of age; 231 boys and 13 girls were 8 years old; 285 boys and 10 girls were 9 years old. At 10 years, 391 boys and 20 girls were truants; 456 boys and 18 girls were 11 years old; 258 boys and 13 girls reached 14 years; of the high school age, 126 were boys and 17 girls.

In previous years the third grade invariably supplied the greatest number of truants. In 1912 the fourth grade was the maximum in this respect. Last year the fourth and fifth grades supplied 650 boys and 26 girls and 628 boys and 26 girls respectively, compared with 553 boys and 23 girls from the third grade. The sixth grade had 391 boys and 18 girls; the seventh, 210 boys and 16 girls; the eighth, 64 boys and 7 girls. Among the first grade truants, 266 were boys and 15 girls. The second grade had 362 boys and 15 girls.

Sub-Normal Truants.

Thirty-six boys and one girl were enrolled in the rooms for sub-normals.

The question of the sub-normal truant has become a complex one. The Parental School does not desire the sub-normal truants because it is necessary to keep them so much beyond the average time of detention. In the public schools, the sub-normal pupils attend special divisions, and owing to defective mentality the retardation in grade advancement is inevitable. Backward pupils

often develop into truants. Some provision should be made, either at the Parental School or elsewhere, for a separate cottage or place to care for this unfortunate class of children. One sub-normal truant, if allowed to run the streets and be immune from commitment to the Parental School, could lead normal boys into truancy and delinquency.

Sub-normal children fourteen years of age, or over, who cannot read nor write simple sentences, are refused work certificates at the Age and School Certificate Bureau, because the child labor law prohibits the issuance of certificates to children who cannot pass this simple educational test of penmanship. Recently, a fourteen-year-old girl of low mentality, after three years of attendance in a sub-normal room, could not read nor write simple sentences and was refused a certificate. Even if certificates are granted to sub-normal children, employers do not desire them for permanent service, and the question of vocational adaptation for these backward children is one that puzzles social welfare workers.

There is a state institution for feeble-minded children, but no institution for the sub-normal, backward or "borderline" children, who are not sufficiently defective in mentality to be classified as feeble-minded.

Under the superficial marriage law of Illinois, sub-normal men and women wed. There is need of immediate amendment of the marriage law of this state for the sake of the children of the commonwealth. The very great number of defective children in our special divisions is largely due to legislative indifference and public apathy which permit the marriages of some men and women who are unfit mentally, morally or physically to assume the sacred duties of parenthood and posterity.

There should also be an amendment to the marriage law to better safeguard the issuance of marriage licenses by the County Clerk, and requiring both principals to the contemplated ceremony to appear personally at the marriage license window when application for license is made.

During the year it was necessary for this bureau to intervene at the County Clerk's office, to stop the marriage mills, in which fourteen-year-old school girls were being sacrificed. Country justices of the peace, operating within the city limits in ministerial capacity, had invaded the County Building, and with the aid of agents and guides were reaping a harvest in fees—one justice of the peace averaging more than 200 marriages a month.

A conference of social workers in public and private service was called by Mrs. Joseph T. Bowen and Mrs. Gertrude Howe Brit-

ton, of the Juvenile Protective Association. The subject of immediate co-operation was urged, and the Compulsory Education Bureau was selected to lead the crusade to stop child marriages and break up the marriage mill in the County Building. With the co-operation of Mr. Robert Sweitzer, County Clerk, and Miss Nellie Carlin, Public Guardian, followed by several prosecutions, this was soon successfully accomplished.

Proper and permanent vigilance by county clerks, even under the present law, in the issuance of licenses, will check the evil, but it will not be thoroughly exterminated until there is a more effective law requiring absolute proof of age; the commitment of a few perjurers to jail and an amendment to the Municipal Court law that will prevent country justices of the peace from operating in a ministerial capacity in Chicago—just as they have been deprived of judicial jurisdiction.

Special Industrial Rooms.

The special divisions for truants have proved of great value in the correction of truancy, and in discipline cases. During the year 432 petitions were received from principals for the transfer of pupils to the special industrial rooms. It was found necessary to take only 38 of this number to the Juvenile Court for commitment to the Parental School.

Destructive Agencies.

In the constructive work of future good citizens the schools are doing their share in the intellectual uplift, and the morals of the school zone during school hours are protected by the vigilance of principals, teachers, truant officers, engineers, special officers from this bureau, and organizations that co-operate for the welfare of children.

It is the whereabouts and habits of children outside of school hours and during the vacation period that contribute a great factor in juvenile delinquency. Moral conditions on school property were never better than at present, and comparatively few complaints were received where offenses were committed at the schools. But the behavior of children outside of school hours, in home neighborhoods or public places, showed how lax some parents are in their duty to look after the whereabouts of their boys and girls in the evening, or during the hours of from 4 to 6 P. M., and on Saturdays when there is no school.

Since the conviction of a number of degenerate men who were sent to the penitentiary as a result of prompt arrest and

prosecution by the co-operation of this bureau, the state's attorney's office and the police department, the vicinity of the schools has been cleared of the reprehensible presence of men who annoyed little girls. But these wolves of the city lurk about public places, nickel theatres and lonely neighborhoods, seeking to lure the child, with the result that crimes against children cases fill our Criminal Court dockets, and by the grace of procrastination, "pull," loop-holes of technicality in the law and public apathy, it requires persistent attention to convict some of these moral perverts who disgrace the community. Some of these men are sub-normal, and the recent murder of a six-year-old baby girl by a half-witted man shows the danger of permitting such creatures to be at large.

During the year this bureau successfully prosecuted a number of cases of crimes against children that occurred outside of school hours. Several were instances where the absence of children from school was due to adult degenerates. In the active policy of prosecution and driving these men from the vicinity of the school houses, the Superintendent of Schools, the President and Members of the Board of Education have invariably given us their firm and effective support.

Lake Boat Excursion Dangers.

In June and July the department, at the suggestion of Dean Walter T. Sumner, of the School Management Committee, approved by the Superintendent of Schools, conducted an investigation of conditions on the lake excursion boats, so extensively patronized by school children during the Summer months. Investigators covered these boats for the purpose of making known to parents and the public the conditions found.

It was ascertained that during the Summer of 1914 many of these excursion boats were merely floating saloons, and that the rule prohibiting sale of liquor to minors was not enforced. The discipline on most of the boats was lax; unescorted young girls were subjected to indignities; immoral women and licentious men patronized the boats, and moral conditions were bad, and anyone with "the price" could rent a state-room. The government is now following up the investigation. Slot machines, paddle and wheel games gave children their first lesson in gambling; bars were opened before the three-mile limit was reached; minors were found drunk; men took indecent liberties with women, and rowdiness was rampant on "big days"—especially the Fourth of July. While the majority of passengers conduct themselves properly, there is a vicious and degenerate minority, including a clique of

young men who infest the boats, looking upon unescorted young girls as "legitimate prey."

It was found that the boats only carried life boats and life rafts to save the lives of 30 per cent of their passengers, and this means that a boat licensed to a capacity of 2,600 to 3,000 passengers during the excursion period (May 15 to October 15) would be able to provide life boats and life rafts for less than one-third on board if the boat was crowded to its capacity. These boats are crowded to the rail on holidays and week-end trips. Life preservers are plentiful, but life preservers are not adequate protection for small children. The crews are small and unless there is amended national legislation to compel excursion boats to increase their life boat equipment, personal safety on an overcrowded Lake Michigan excursion boat is a risk in which humanity must depend upon Fate as to whether it would be numbered among the "one-third saved" or the two-thirds that would be dependent upon life preservers. Among the latter would doubtless be many children with only a circle of cork around them to float their frightened souls to rescue.

It was found that the majority of excursion boats encouraged the gambling spirit among children and that money was accepted from a six-year-old child to play the paddle game. In this investigation of the conditions on the excursion boats our officers found that the Christopher Columbus maintained the best discipline on board among its passengers. No slot machines, nor gambling devices of any kind were found on board; six boat patrolmen maintained order and the moral conditions during the period named were the best of any boat under surveillance. The City of South Haven maintains several patrolmen but, unfortunately, permits games of chance that are patronized by school children. Parents should not permit their children to go on any excursion boat unescorted. I recommend that the lake excursions of the vacation schools be abandoned until every boat is better equipped with adequate life saving facilities. The bars on these boats should either be better regulated or eliminated.

Every public place, including amusement parks and theatres, as well as bathing beaches, should be strongly policed by special officers as well as regular police officers, to make "safety first" apply to the moral protection of women and children. Juvenile delinquency is not a sequel of school life but a sequel of the life of the school child outside of school hours, and the court records will corroborate this statement.

The "Fourteen to Sixteen" Problem.

The compulsory education law of Illinois holds parents and guardians responsible (in instances where the children are under their control) for the regular school attendance of the children between the ages of seven and sixteen years—provided that at the age of fourteen children may secure age and work certificates and go to work if necessity exists for the withdrawal from school to secure employment.

For some time work certificates were automatically given to all fourteen-year-old children who applied for the same, whether or not they were to be "necessarily employed". The child labor law made no exception for necessitous cases, but the interpretation of the compulsory education law, by this bureau, decreed school attendance until the sixteenth year unless necessity at fourteen, or thereafter, created conditions that justified the issuance of the certificate.

With thousands of children leaving school to be sacrificed to child labor for a pittance of pay (the majority of whom had not finished sixth grade at fourteen) it was necessary to test that clause of the compulsory education law to stop the menace to the educational welfare of children in Chicago. Judge John Newcomer, of the Municipal Court, sustained us in his decision in the case of *The People vs. Sahrouda*—a parent who desired to place his fifteen-year-old girl in a factory instead of permitting her to graduate. No financial necessity for employment existed and our department challenger, at the age and school certificate bureau, objected to the issuance of the certificate. As the child could not legally be employed without the certificate, and as Sahrouda refused to return her to school, the father was taken before Judge Newcomer, whose timely and humane decision was of far-reaching value to social service and juvenile protection. The girl returned to school, happy at the chance to complete her education at the grammar school. This decision placed in the hands of the principals an effective precedent to safeguard against the issuance of initiative age and school certificates when necessity for employment did not exist. It put a check on the greed of parents and was a progressive step in the solution of the enforcement of the most complex phase of the compulsory education law.

Our officers and special enumerators traced children after they secured certificates, and the investigations justify the great necessity of vocational guidance and an employment bureau. Most parents cared for only immediate employment for their children, in any vocation, regardless of the child's adaptation, while many

parents did not know and did not care where their children worked, as long as they brought home their pay envelope. Of the certificates issued for vacation work only, 1,964 boys and 721 girls secured temporary employment during the Summer—a total of 2,685. Of this number, 1,592 boys and 550 girls came from public schools and 372 boys and 171 girls from private schools. In regular employment many children went to work whose parents announced that their permanent withdrawal from school was a necessity.

Small Wages for Children.

What material aid do these children give to their homes to relieve this necessity? Here is the answer: The schedule of wages, ranging from \$1.00 a week and up, showing a small average—information obtained at the homes of the children.

It was found in Group A. of 2,390 boys from Public and Private Schools, that the following wages were paid:

Wage.	From Public Schools.	From Private Schools.
\$1.00 to \$ 2.00 a week.....	6	1
2.00 to 3.00 a week.....	21	3
3.00 to 4.00 a week.....	126	45
4.00 to 5.00 a week.....	508	309
5.00 to 6.00 a week.....	521	162
6.00 to 7.00 a week.....	165	47
7.00 to 8.00 a week.....	33	7
8.00 to 9.00 a week.....	17	5
9.00 to 10.00 a week.....	4	3
Wages not known.....	237	97
No wage.....	17	5
Piece work	40	11
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Totals	1,695	695

Group B.—1,867 girls from Public and Private Schools received the following remuneration:

Wage.	From Public Schools.	From Private Schools.
\$1.00 to \$2.00 a week.....	5	2
2.00 to 3.00 a week.....	29	18
3.00 to 4.00 a week.....	213	89
4.00 to 5.00 a week.....	383	283
5.00 to 6.00 a week.....	199	78
6.00 to 7.00 a week.....	54	32
7.00 to 8.00 a week.....	15	3
8.00 and over.....	3	80
Wage unknown	184	3
Housework	72	23
Piece work	48	28
No wage—learning trade.....	22	...
Totals.....	1,227	640

Group C. (Vocations.)—The following is the apportionment:

	Boys		Girls		
	Public Schools.	Private Schools.	Public Schools.	Private Schools.	Grand Total
Factory	358	243	504	362	....
Office	396	141	161	39	....
Store	259	87	231	60	....
Miscellaneous	682	224	331	179	....
Totals.....	1,695	695	1,227	640	4,257

In this group 194 were found to be absolutely unnecessary and the children were returned to school.

In the investigation of home conditions, 860 came from good homes and 2,265 from fair homes, which would indicate that the high cost of living was a factor in this group, which is only one of many investigated. Children who are found to be out of work, more than thirty days, and have no permanent employment are returned to school, but as soon as they secure a position they leave school again. This alternating between school and employment is difficult to regulate, and the only effectual solution lies in the extension of the maximum of compulsory attendance age to sixteen years.

The Parental School law should also be amended to receive truants over fourteen years, up to the age of sixteen. Many boys between these ages are beyond parental control and provision should be made for the truant of those ages to obviate his commitment to a corrective institution for delinquents where the inmates commit greater offenses than truancy. Under the present law provision is made at the Parental School only for those under fourteen years.

In Group D. (another group investigated earlier in the year) the same wage conditions prevailed, and the following recapitulation shows results of investigation among 3,040 working boys and girls over fourteen who came from public and private schools:

	Boys.	Girls	Totals
At work	1,342	830	2,172
Necessarily employed.....	1,082	709	1,791
Employment not necessary....	260	121	381
Factory	301	315	616
Office.....	409	141	550
Store	278	161	439
Miscellaneous	354	213	567
Good homes	280	134	414
Bad homes	97	56	153
Fair homes	1,226	703	1,929
Destitute homes	96	104	200

348 had been at work over thirty days and 1,824 less than thirty days. The children were traced soon after the certificates were issued, with allowance for time for them to secure employment. If children were not given certificates until employment were assured it would improve conditions and better protect school attendance.

Statistical tables in detail on this work are on file in the bureau. It was the invariable rule to notify parents to return children to school if they were neither at work nor at school, and truant officers followed up these cases.

In Group E. similar to the above, and covering 1410 children, the same average wage, vocation, environment, etc., followed.

Grades and Nativity.

In Group F. showing grade classifications among 2,416 working children revealed the fact that only 196 of 2,416 were graduated from eighth grade, (of 570 from that grade) when they went to work 264 had only fourth grade education with which

to enter the competitive life of industrialism. 7 came from first grade at fourteen; 35 from the second grade; 72 from the third; 718 from the seventh and 711 from the sixth.

Of the 2,416 children in Group F. 2,506 had foreign-born fathers and 534 had American-born fathers. Of the children 2,390 were American-born and 650 were foreign-born.

The family incomes in these cases were as follows:

Income.	Cases
Under \$10.00 a week.....	498
\$10.00 to \$15.00 a week.....	628
\$15.00 to \$20.00 a week.....	577
\$20.00 to \$25.00 a week.....	435
\$25.00 to \$30.00 a week.....	358
Over \$30.00 a week.....	544

In this group 2,181 families paid rent and 859 owned their homes. Of the wages paid the children, 101 earned less than \$3.00 a week; 392 drew from \$3.00 to \$4.00 a week; 623 earned \$4.00 to \$5.00; 396 from \$5.00 to \$6.00, and 157 over \$6.00 a week.

Over 730 were unnecessarily employed and in 2,310 cases necessity existed. The work was temporary in 555 cases, and possibly permanent with 2,485 children who would never return to school. The factories claimed, of this number, 637; offices, 762, and stores, 335; 1,306 were in miscellaneous vocations, 19 children had physical or mental defects.

These groups covered different investigations at various periods. They all show the same pathetic result. The same old story of the "shadow children" of a great city, wasting their young lives at the sacrifice of education and health in the shadows of the industrial life. These are official and complete statistics, obtained by personal visitation of representatives of this bureau. These dependable statistics show, among other features of sociological interest, the value of our evening schools—the only hope of many of these children to finish the education interrupted by the call of the factory.

After presentation of conditions in this report, it can only be added that the causes of truancy are about the same now as ever—insanitary environment; poverty; intemperance; domestic dissension among parents leading to division of lives and homes; backwardness at school due to physical or mental defects; wife desertion; parental incompetency or indifference, or evil communications of the street and older boys. The regrettable existence of child labor and the issuance of so many work certificates is due to social conditions; to the demand for cheap labor; to poverty and

the causes of poverty. The child labor law could be more successfully enforced if the State did not maintain a policy of "maximum legislation" with "minimum appropriation." Illinois has only 25 factory inspectors to enforce its child labor law in thousands of factories and mercantile establishments and offices in Chicago and throughout the State.

In conclusion, I desire to express my profound appreciation of the support and co-operation given our work by the Superintendent of Schools, the members and officials of the Board of Education, the teaching corps and the press of Chicago. Successful achievement has also been made possible by the effective and faithful assistance of my fellow employes in each division of the bureau of which I have the honor to be Superintendent, and it is with pleasure that grateful acknowledgement is given for the same in this official report.

Respectfully submitted,

WM. L. BODINE,

Superintendent of Compulsory Education.

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Statistics for 1913-1914

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TABLE I.

Enrollment 1913-1914.

	Boys.	Girls.	Total.
Chicago Normal College.....	14	578	592
Junior College	126	1	127
High Schools, Original Enrollment.....	10,990	11,711	22,701
High Schools (1).....	1,956	1,851	3,807
Total	12,946	13,562	26,508
Kindergartens	15,503	15,866	31,369
First Grade	33,570	30,578	64,148
Second Grade	18,515	17,159	35,674
Third Grade	18,462	17,460	35,922
Fourth Grade	17,482	16,526	34,008
Total Primary Department	88,029	81,723	169,752
Fifth Grade	16,724	15,658	32,382
Sixth Grade	14,587	14,131	28,718
Seventh Grade	10,948	11,527	22,475
Eighth Grade	8,597	9,644	18,241
Total Grammar Department	50,856	50,960	101,816
Total Elementary Grades	138,885	132,683	271,568
Schools for the Deaf.....	174	125	299
Ungraded—			
Subnormal and Truant.....	629	203	832
Epileptics	7	5	12
Adults	452	26	478
Apprentices	651	4	655
Juvenile Detention Home.....	2,629	986	3,615
Total, Regular Day Schools	170,060	162,188	332,248
Evening Schools	25,527	12,487	38,014
Total for the Year	195,587	174,675	370,262
Vacation Schools	7,879	8,135	16,014

(1) The pupils promoted from elementary to high schools at beginning of second semester. As they had been enrolled in the elementary schools, they are not again counted in the total enrollment. 26,508 represents the number of individuals entering the high schools during the year.

TABLE II.

**Average Daily Membership and Average Daily Attendance
by Grades—1913-1914.**

	Enroll- ment.	Average Daily Membership.	Average Daily Attendance.	Per Cent of Attend- ance.
First Grade	64,148	45,996.9	42,724.2	92.9
Second Grade	85,674	82,415.7	80,631.5	94.5
Third Grade	35,922	82,721.8	81,108.6	95.1
Fourth Grade	84,008	80,712.7	29,231.5	95.2
Total, Grades 1 to 4, Inclusive	169,752	141,847.1	133,695.8	94.8
Fifth Grade	82,382	29,543.3	28,201.7	95.5
Sixth Grade	28,718	26,606.7	25,396.3	95.5
Seventh Grade	22,475	21,342.3	20,451.6	95.8
Eighth Grade	18,241	17,994.4	17,343.4	96.4
Total, Grades 5 to 8, Inclusive	101,816	95,486.7	91,393.0	95.7
Total Elementary Grades.	271,568	237,333.8	225,088.8	94.8
Ninth Grade (2).....	10,482	6,086.2	5,820.8	95.6
Tenth Grade	4,508	4,107.0	3,907.9	95.2
Eleventh Grade	3,154	2,920.8	2,783.1	95.3
Twelfth Grade	2,506	2,509.7	2,399.9	95.6
Vocational, First Year.....	3,792	3,486.9	3,333.8	95.6
Vocational, Second Year.....	1,489	1,554.4	1,400.9	93.9
Specials Unclassified	78	86.6	81.1	93.6
Total High Schools.....	26,009	20,751.6	19,787.5	95.4
Junior College, First Year.....	103	90.6	86.8	95.6
Junior College, Second Year.....	24	23.4	22.1	93.9
Chicago Normal College.....	592	494.2	478.4	96.8
Kindergartens	31,369	16,034.7	14,276.3	89.0
Schools for the Deaf.....	299	261.3	247.4	94.6
Schools for the Blind (1).....	44	88.8	86.8	94.8
Schools for Crippled Children (1).....	322	206.5	194.9	94.4
Parental School (1).....	763	313.2	313.2	100.0
John Worthy School (1).....	425	104.4	99.2	95.0
Juvenile Detention Home.....	3,615	.....	.....	.....
Apprentice Schools (3).....	655	(4) 234.1	(4) 206.5	(4) 88.2
Ungraded Adults	478	122.2	121.8	99.7
Subnormal and Truants.....	832	913.1	840.3	92.0
Epileptics	12	10.2	9.2	90.2
Prevocational (in High Schools) (5)	499	447.9	423.8	94.5
Total, Regular Day Schools	332,248	276,558.2	261,447.7	94.2
Vacation Schools	16,014	.....	10,734.0	....
Evening Schools	88,014	.....	19,023.4	....

(1) Counted in Grades above.

(2) This includes 8,807 transferred from the elementary schools at the beginning of second semester, which are not counted in total at foot of column.

(3) Carpenters, 261; Electrical Workers, 141; Plumbers, 185; Machinists, 6; Sheet Metal Workers, 27; Gas-fitters, 11; Miscellaneous, 24.

(4) The average membership and attendance daily for 3 months. School was in session, Carpenters' school day only. The average membership and attendance, counted for 10 months, was 75.2 and 68.8 which are the figures counted in the total. Average membership and attendance of other apprentices, who attended one-half day each week not given in table.

(5) This represents only the number enrolled—not those transferred from elementary schools during the year. The total number entering pre-vocational classes in the technical high schools was 702.

TABLE III.
Age of Pupils at the Time of Their First Enrollment During the Year 1913-1914.

AGE OF PUPILS	FIRST GRADE			SECOND GRADE			THIRD GRADE			FOURTH GRADE		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Number under 6 years.....	2,630	2,602	5,222	3	5	8	0	0	0	0	0	0
Number between 6 and 7 years.....	18,390	17,185	35,565	1,310	1,437	2,747	54	46	100	0	0	0
Number between 7 and 8 years.....	7,675	6,675	14,350	7,881	8,040	15,871	1,341	1,620	2,971	51	83	134
Number between 8 and 9 years.....	2,352	1,976	4,328	5,403	4,712	10,115	6,608	6,975	13,608	1,455	1,717	3,172
Number between 9 and 10 years.....	818	734	1,552	2,194	1,687	3,881	5,412	4,978	10,390	5,646	6,084	11,680
Number between 10 and 11 years.....	450	432	912	809	625	1,434	2,654	2,120	4,774	4,806	4,463	9,269
Number between 11 and 12 years.....	296	302	598	365	272	637	1,103	882	1,985	2,785	2,297	5,083
Number between 12 and 13 years.....	311	271	582	216	154	370	578	423	1,003	1,381	1,105	2,486
Number between 13 and 14 years.....	354	213	406	161	120	281	355	282	638	926	613	1,539
Number between 14 and 15 years.....	187	93	280	83	71	159	149	79	228	239	173	412
Number between 15 and 16 years.....	103	64	172	43	25	68	65	29	95	94	32	126
Number between 16 and 17 years.....	56	15	73	17	7	24	46	9	55	26	5	31
Number between 17 and 18 years.....	12	6	18	7	3	10	4	3	7	1	2	3
Number between 18 and 19 years.....	11	7	18	3	0	3	3	0	3	0	2	2
Number between 19 and 20 years.....	4	2	6	3	1	3	2	0	2	1	0	1
Number between 20 and 21 years.....	2	1	3	3	0	3	1	1	2	0	0	0
Over 21 years.....	3	0	3	0	0	0	0	1	1	1	0	1
Total	33,570	30,578	64,148	18,515	17,169	35,674	16,462	17,460	33,922	17,453	16,828	34,281

TABLE III.—Continued.
Age of Pupils at the Time of Their First Enrollment During the Year 1913-1914.

AGE OF PUPILS	FIFTH GRADE			SIXTH GRADE			SEVENTH GRADE			EIGHTH GRADE		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Number under 6 years	0	0	0	0	0	0	0	0	0	0	0	0
Number between 6 and 7 years	0	0	0	0	0	0	0	0	0	0	0	0
Number between 7 and 8 years	0	0	0	0	0	0	0	0	0	0	0	0
Number between 8 and 9 years	0	0	0	0	0	0	0	0	0	0	0	0
Number between 9 and 10 years	16	208	224	104	119	223	3	0	3	0	0	0
Number between 10 and 11 years	1,246	2,898	4,144	1,308	1,492	2,800	86	111	196	0	0	0
Number between 11 and 12 years	4,661	9,880	14,541	3,882	4,299	8,181	965	1,226	2,201	312	3	3
Number between 12 and 13 years	4,548	8,688	13,236	4,187	4,194	8,381	3,130	3,713	6,843	967	1,321	2,288
Number between 13 and 14 years	3,098	5,711	8,809	3,450	2,886	6,336	3,096	3,631	6,727	2,904	3,632	6,536
Number between 14 and 15 years	2,060	2,457	4,517	1,983	394	2,377	2,175	1,664	3,839	2,782	2,968	5,750
Number between 15 and 16 years	655	1,000	1,655	327	310	637	710	689	1,399	1,331	1,208	2,539
Number between 16 and 17 years	166	222	388	92	26	118	177	135	312	570	567	1,137
Number between 17 and 18 years	54	72	126	11	26	37	23	26	49	56	76	131
Number between 18 and 19 years	7	16	23	11	5	16	6	2	8	6	16	22
Number between 19 and 20 years	3	11	14	4	1	5	5	0	5	3	3	6
Number between 20 and 21 years	0	2	2	3	4	7	0	0	0	1	1	2
Number between 21 and 22 years	1	1	2	7	0	7	0	0	0	3	3	6
Over 22 years	3	3	6	0	0	0	1	0	1	3	3	6
Total	10,724	32,332	43,056	14,587	14,181	28,768	10,948	11,587	22,535	8,597	9,646	18,243

TABLE III.—Continued.
Age of Pupils at the Time of Their First Enrollment During the Year 1913-1914.

AGE OF PUPILS	NINTH GRADE			TENTH GRADE			ELEVENTH GRADE			TWELFTH GRADE		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Number between 11 and 12 years.....	2	2	4	1	0	1	0	0	0	0	0	0
Number between 12 and 13 years.....	77	77	154	8	6	9	0	1	1	0	0	0
Number between 13 and 14 years.....	557	608	1,160	68	91	159	7	13	20	0	0	0
Number between 14 and 15 years.....	1,206	1,188	2,393	406	437	843	49	97	106	3	6	9
Number between 15 and 16 years.....	999	870	1,869	777	872	1,649	276	292	567	59	44	103
Number between 16 and 17 years.....	874	368	1,242	616	568	1,179	561	692	1,153	356	296	652
Number between 17 and 18 years.....	1,119	129	1,248	248	234	482	401	417	818	430	562	982
Number between 18 and 19 years.....	29	24	53	74	60	134	200	167	367	230	319	549
Number between 19 and 20 years.....	13	5	18	21	8	29	50	49	99	127	96	223
Number between 20 and 21 years.....	4	3	7	9	6	15	11	6	17	31	19	50
Over 21 years.....	18	9	27	6	2	8	8	8	16	11	7	18
Total.....	3,397	3,278	6,675	2,929	2,279	4,508	1,562	1,592	3,154	1,197	1,309	2,506

TABLE III--Continued.
Age of Pupils at the Time of Their First Enrollment During the Year 1913-1914.

AGE OF PUPILS	KINDERGARTEN			DEAF			SUBNORMAL AND TRUANT			EPILEPTICS		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Number under 6 years.....	15,041	15,447	30,488	04	13	25	16	7	23	0	0	0
Number between 6 and 7 years.....	429	300	819	21	7	28	9	10	19	0	0	0
Number between 7 and 8 years.....	26	22	48	11	10	21	18	11	29	0	1	1
Number between 8 and 9 years.....	2	4	6	9	13	21	26	24	60	2	0	2
Number between 9 and 10 years.....	1	3	4	22	16	38	77	20	97	0	0	0
Number between 10 and 11 years.....	3	0	3	20	6	26	93	33	126	0	1	1
Number between 11 and 12 years.....	2	1	3	13	9	27	114	31	145	1	0	1
Number between 12 and 13 years.....	0	0	0	12	10	22	84	24	108	1	1	2
Number between 13 and 14 years.....	0	0	0	14	30	24	91	18	109	1	1	2
Number between 14 and 15 years.....	0	0	0	5	7	12	53	19	72	1	0	1
Number between 15 and 16 years.....	0	0	0	7	10	17	29	8	32	0	1	1
Number between 16 and 17 years.....	0	0	0	9	10	19	6	3	9	0	0	0
Number between 17 and 18 years.....	0	0	0	7	6	13	1	0	1	0	0	0
Number between 18 and 19 years.....	0	0	0	3	1	4	2	0	2	0	0	0
Number between 19 and 20 years.....	0	0	0	1	1	2	0	0	0	0	0	0
Number between 20 and 21 years.....	0	0	0	0	0	0	0	0	0	0	0	0
Over 21 years.....	0	0	0	1	1	2	0	0	0	0	0	0
Total	15,503	15,803	31,306	174	125	299	629	203	832	7	5	12

TABLE III.—Continued.
Age of Pupils at the Time of Their First Enrollment During the Year 1913-1914.

AGE OF PUPILS	ADULTS			SPECIAL APPRENTICES			CARPENTER APPRENTICES			JUVENILE DETENTION HOME		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Number under 6 years.....	0	0	0	0	0	0	0	0	0	83	30	113
Number between 6 and 7 years.....	0	0	0	0	0	0	0	0	0	32	11	43
Number between 7 and 8 years.....	0	0	0	0	0	0	0	0	0	28	7	35
Number between 8 and 9 years.....	0	0	0	0	0	0	0	0	0	50	14	64
Number between 9 and 10 years.....	0	0	0	0	0	0	0	0	0	84	19	103
Number between 10 and 11 years.....	0	0	0	0	0	0	0	0	0	101	13	114
Number between 11 and 12 years.....	0	0	0	0	0	0	0	0	0	160	20	180
Number between 12 and 13 years.....	0	0	0	0	0	0	0	0	0	218	31	249
Number between 13 and 14 years.....	0	0	0	0	0	0	0	0	0	314	47	361
Number between 14 and 15 years.....	2	1	3	0	0	0	0	0	0	457	187	644
Number between 15 and 16 years.....	5	0	5	0	0	0	0	0	0	323	183	506
Number between 16 and 17 years.....	27	1	28	8	0	8	2	0	2	504	227	731
Number between 17 and 18 years.....	22	3	25	36	2	38	31	0	31	39	14	53
Number between 18 and 19 years.....	35	8	43	90	0	90	72	0	72	6	1	7
Number between 19 and 20 years.....	39	2	41	80	0	80	81	0	81	0	0	0
Number between 20 and 21 years.....	70	4	74	80	0	80	55	0	55	0	0	0
Over 21 years.....	352	12	364	117	0	117	20	0	20	0	0	0
Total	162	36	198	390	4	394	261	0	261	2,629	983	3,612

TABLE III.—Continued.
Age of Pupils at the Time of Their First Enrollment During the Year 1913-1914.

AGE OF PUPILS	PRE-VOCATIONAL COURSE									POST GRADUATE		
	SIXTH GRADE			SEVENTH GRADE			EIGHTH GRADE			Boys	Girls	Total
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total			
Number between 11 and 12 years.....	0	0	0	0	0	0	0	0	0	0	0	0
Number between 12 and 13 years.....	0	0	0	1	0	1	0	0	0	0	0	0
Number between 13 and 14 years.....	0	0	0	3	1	4	2	0	2	0	0	0
Number between 14 and 15 years.....	13	15	28	82	15	97	4	3	7	0	0	0
Number between 15 and 16 years.....	6	12	18	102	21	123	59	22	81	0	0	0
Number between 16 and 17 years.....	4	4	8	26	12	38	49	11	60	0	4	4
Number between 17 and 18 years.....	1	0	1	1	3	4	16	7	23	0	3	3
Number between 18 and 19 years.....	0	1	1	0	0	0	1	0	1	4	13	17
Number between 19 and 20 years.....	0	0	0	1	0	1	1	0	1	2	25	27
Number between 20 and 21 years.....	0	0	0	0	0	0	0	0	0	4	15	19
Over 21 years.....	0	0	0	0	0	0	0	0	0	2	2	4
Total.....	24	32	56	216	52	268	133	46	175	12	65	78

TABLE III-A.

Age of Pupils Graduated from the Elementary Schools at the
Time of Graduation—1913-1914.

Age of Pupils.	Boys.	Girls.	Total.
Number between 11 and 12 years.....	23	28	46
Number between 12 and 13 years.....	303	365	668
Number between 13 and 14 years.....	1,644	2,197	3,841
Number between 14 and 15 years.....	3,044	3,467	6,511
Number between 15 and 16 years.....	1,945	2,067	4,012
Number between 16 and 17 years.....	647	615	1,262
Number between 17 and 18 years.....	103	103	206
Number between 18 and 19 years.....	17	16	33
Number between 19 and 20 years.....	7	1	8
Number between 20 and 21 years.....	9	1	10
Over 21 years.....	8	2	10
Total.....	7,750	8,857	16,607

TABLE III —Concluded.

Age of Pupils at the Time of Their First Enrollment During the
Year 1913-1914.

AGE OF PUPILS.	NORMAL COLLEGE			TOTALS FOR THE CITY		
	Boys	Girls	Total	Boys	Girls	Total
Number under 6 years.....	0	0	0	17,732	18,108	4
Number between 6 and 7 years.	0	0	0	20,725	70,070	1
Number between 7 and 8 years.....	0	0	0	16,981	16,486	1
Number between 8 and 9 years.....	0	0	0	16,000	15,549	1
Number between 9 and 10 years.....	0	0	0	15,707	15,261	1
Number between 10 and 11 years....	0	0	0	15,042	14,458	1
Number between 11 and 12 years. .	0	0	0	14,864	13,646	1
Number between 12 and 13 years....	0	0	0	14,278	13,808	1
Number between 13 and 14 years....	0	0	0	15,120	13,758	1
Number between 14 and 15 years .	0	0	0	10,832	9,642	1
Number between 15 and 16 years....	0	0	0	6,437	6,700	1
Number between 16 and 17 years. .	0	7	7	3,763	2,160	
Number between 17 and 18 years....	1	48	49	1,830	1,277	
Number between 18 and 19 years. .	2	139	133	916	638	
Number between 19 and 20 years....	2	162	156	481	343	
Number between 20 and 21 years....	2	102	104	375	167	
Over 21 years.....	3	30	34	670	126	
Total.....	14	578	592	170,000	162,168	322,246

TABLE III-B—Continued.
Age of Pupils Graduated From the High Schools at the Time of Graduation, 1913-1914.

AGE OF PUPILS	JUNIOR COLLEGE COURSE			FOUR-YEAR COURSE			TWO-YEAR COURSE			PRE-VOCATIONAL COURSE		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Number between 14 and 15 years.....	.....	.....	.....	.....	.....	.....	12	24	36	15	3	18
Number between 15 and 16 years.....	.....	.....	.....	15	16	31	91	180	271	53	16	74
Number between 16 and 17 years.....	.....	.....	.....	111	90	201	103	255	358	63	15	78
Number between 17 and 18 years.....	.....	.....	.....	371	414	785	67	96	163	33	8	41
Number between 18 and 19 years.....	1	.....	1	363	465	831	23	26	52	1	.....	1
Number between 19 and 20 years.....	4	.....	4	139	221	410	2	3	5	.....	.....	.....
Number between 20 and 21 years.....	3	.....	3	53	35	94	2	1	3	.....	.....	.....
Over 21 years.....	3	.....	3	19	12	31	1	.....	1	.....	.....	.....
Total.....	17	.....	17	1,129	1,254	2,383	309	535	894	170	42	212

TABLE IV.

Promotions by Grades—1913-1914.

	Boys.	Girls.	Total.	Percentage of Promotions Based on Average Daily Membership.
Kindergarten to First Grade.....	7,146	6,955	14,101	87.9
First to Second Grade.....	19,250	18,362	37,612	81.8
Second to Third Grade.....	16,850	16,099	32,949	101.6
Third to Fourth Grade.....	16,136	15,400	31,536	96.4
Fourth to Fifth Grade.....	15,185	14,555	29,740	96.8
Total, Grades One to Four, In- clusive	67,421	64,416	131,837	92.9
Fifth to Sixth Grade.....	13,802	13,353	27,155	91.9
Sixth to Seventh Grade.....	12,301	12,248	24,549	92.3
Seventh to Eighth Grade.....	9,557	10,194	19,751	92.5
Eighth to Ninth Grade.....	7,750	8,857	16,607	92.3
Total, Grades Five to Eight, Inclusive	43,410	44,652	88,062	92.2
Total Promotions in Ele- mentary Schools	117,977	116,023	234,000	91.9
Ninth to Tenth Grade.....	2,303	2,311	4,614	75.8
Tenth to Eleventh Grade.....	1,637	1,650	3,287	80.0
Eleventh to Twelfth Grade.....	1,207	1,257	2,464	84.4
Graduates, Four-Year Courses.....	1,129	1,254	2,383	95.0
Total Four-Year Courses.....	6,276	6,472	12,748	81.6
Junior College, First to Second Year	52	.....	52	57.4
Junior College, Graduates.....	18	.....	18	77.0
Total Junior College Course...	70	.....	70	61.4
Two-Year Vocational, First to Sec- ond Year	975	1,392	2,367	68.0
Two-Year Vocational, Graduates....	301	555	856	55.1
Total Two-Year Vocational Course	1,276	1,947	3,223	68.9
Pre-Vocational, Sixth to Seventh Grade	42	32	74	253.4
Pre-Vocational, Seventh to Eighth Grade	231	40	271	110.5
Pre-Vocational, Graduates	170	42	212	122.6
Total Pre-Vocational Course...	443	114	557	124.4
Total Promotions in High Schools	8,065	8,538	16,598	77.9
Normal College, First to Second Year	5	265	270	....
Normal College, Graduates.....	5	216	221	....
Total Promotions, Normal College	10	481	491	99.4
Total Promotions in all Departments	126,052	125,037	251,089	90.8

TABLE V.**Regularity of Attendance of Pupils—1913-1914.**

	Boys.	Girls.	Total.
1. Total number of pupils neither absent nor tardy a single half-day during the entire year.....	6,268	5,706	11,974
2. Total number of pupils not tardy a single half-day during the entire year (including those counted under 1).....	72,551	77,714	150,265
3. Total number of pupils not absent a single half-day during the entire year (including those counted under 1).....	7,609	6,924	14,623

TABLE VI.**Enrollment in Special Schools and Special Classes.**

	Boys	Girls.	Total.
Schools for the Deaf.....	174	126	299
Schools for the Blind.....	19	25	44
Schools for Crippled Children.....	183	139	322
Classes with Defective Speech (pupils examined) .....	.....	.....	1,839
Open Air and Open Window Schools.....	393	384	777
Subnormal and Truant Classes.....	.....	.....	832
Adults (Ungraded).....	452	26	478
Apprentice Schools	651	4	655
Parental School	763	.....	763
John Worthy School.....	425	.....	425
Juvenile Court School.....	2,629	986	3,615
Classes for Epileptics.....	7	5	12
Vacation Schools	7,879	8,135	16,014
Evening Schools	25,527	12,487	38,014

These figures have all been included in Tables I and II.

TABLE VII.

High Schools—1913-1914.

HIGH SCHOOLS.	Original Enrollment of Pupils.	Transferred from Elementary Schools, Second Semester.	Total.	Average Daily Membership.	Average Daily Attendance.	Number of Promotions.	Percent of Attendance.	Percent of Promotions.
Austin	1,044	179	1,223	992.1	942.8	789	95.0	74.6
Bowen	844	155	999	796.9	760.2	586	95.4	73.5
Calumet	358	34	392	338.2	322.9	278	95.6	82.2
Crane Tech.....	1,419	237	1,656	1,301.3	1,241.2	1,105	95.4	84.9
Curtis	530	108	638	521.5	605.5	458	96.9	87.8
Englewood	1,532	148	1,680	1,391.6	1,329.4	1,057	95.5	76.0
Flower Tech.....	288	106	394	252.4	235.4	228	93.4	90.8
Harrison Tech....	633	188	821	652.5	630.6	496	96.6	76.0
Hyde Park	2,162	204	2,366	1,923.9	1,823.5	1,567	94.8	81.4
Lake	850	137	987	789.4	750.4	562	95.1	71.2
Lake View	1,123	179	1,302	1,054.9	1,011.3	837	95.9	79.3
Lane Tech.....	1,566	342	1,908	1,510.8	1,457.4	1,216	96.5	80.5
Marshall	1,193	224	1,417	1,156.7	1,086.0	899	93.9	77.7
McKinley	926	116	1,042	861.9	819.0	699	95.0	81.1
Medill	805	209	1,014	771.6	722.8	689	93.7	89.3
Morgan Park	167	13	180	*162.8	*156.8	128	96.8	78.6
Parker	841	205	1,046	842.6	800.9	643	95.1	76.3
Phillips	1,674	285	1,959	1,539.4	1,456.7	1,120	94.6	72.7
Schurz	1,590	229	1,819	1,496.8	1,437.8	1,235	96.1	80.0
Senn	1,587	258	1,845	1,510.8	1,442.0	862	95.4	57.1
Tuley	901	143	1,044	844.9	808.4	591	95.7	70.0
Waller	795	108	903	731.3	704.5	594	96.3	81.2
Totals.....	22,828	3,807	26,635	21,313.5	20,319.2	16,598	95.3	77.0

* For entire year. Totals are based upon membership and attendance since annexation.

TABLE VIII

Summary, 1913-14.

Showing enrollment, membership, attendance, promotions, non-promotions of those in grade one year, the per cent of attendance, the per cent of promotions and the average number of pupils in charge of each regular teacher of the elementary grades.

SCHOOLS.	Enrollment.	Average Daily Membership.	Average Daily Attendance.	Promotions.	Per Cent of Attendance.	Per Cent of Promotions.	Non-promotions.	Average Number of Pupils to Teacher.
Chicago Normal College	592	494.2	478.4	491	96.8	99.4	.....	..
Austin High	1,044	992.1	942.8	739	95.6	74.5	.....	..
Bowen High	844	796.9	760.2	526	95.4	73.5	.....	..
Calumet High	358	328.2	322.9	278	95.5	82.2	.....	..
Crane Technical High...	1,419	1,301.3	1,241.2	1,105	95.4	84.9	.....	..
Curtis High	530	521.5	505.5	458	96.9	87.8	.....	..
Englewood High	1,532	1,391.6	1,329.4	1,057	95.5	76.0	.....	..
Flower Technical High	288	252.4	235.4	228	93.4	90.3	.....	..
Harrison Technical High	633	652.5	630.6	496	96.6	76.0	.....	..
Hyde Park High.....	2,162	1,923.9	1,823.5	1,567	94.8	81.4	.....	..
Lake High	850	789.4	750.4	562	95.1	71.2	.....	..
Lake View High.....	1,123	1,054.9	1,011.3	827	95.9	79.8	.....	..
Lane Technical High...	1,566	1,510.8	1,457.4	1,216	96.5	80.5	.....	..
Marshall High	1,193	1,156.7	1,086.0	899	93.9	77.7	.....	..
McKinley High	926	861.9	819.0	699	95.0	81.1	.....	..
Medill High	805	771.6	722.8	689	93.7	89.3	.....	..
Morgan Park High...	167	162.8	156.8	128	96.3	78.6	.....	..
Parker High	841	842.6	800.9	643	95.1	76.3	.....	..
Phillips High	1,674	1,539.4	1,456.7	1,120	94.6	72.7	.....	..
Schurz High	1,590	1,496.8	1,437.8	1,235	96.1	80.0	.....	..
Senn High	1,587	1,510.8	1,442.0	862	95.4	57.1	.....	..
Tuley High	901	844.9	808.4	591	95.7	70.0	.....	..
Waller High	795	731.3	704.5	594	96.3	81.2	.....	..
Adams	1,470	1,160.2	1,099.7	987	94.8	85.1	112	40
Agassiz	1,379	1,185.7	1,084.5	988	95.4	87.0	81	42
Albany Avenue	653	598.7	554.1	538	92.5	98.2	41	42
Alcott	1,015	875.3	835.8	828	95.5	94.6	7	39
Altgeld	1,452	1,239.6	1,149.5	1,143	92.7	92.6	29	41
Andersen	1,646	1,445.6	1,337.6	1,390	93.9	96.2	88	48
Armour	1,305	1,022.2	964.9	895	94.3	87.6	39	46
Armstrong	714	582.0	552.1	481	94.9	82.6	34	39
Arnold	1,175	980.4	932.1	848	95.1	86.5	34	42
Auburn Park	274	234.1	224.3	223	95.8	97.4	19	45
Audubon	1,295	1,132.7	1,089.0	1,153	96.1	101.8	43	45
Avondale	1,555	1,344.3	1,272.7	1,195	94.6	88.9	100	41
Bancroft	984	830.9	783.2	741	94.3	89.2	46	42
Barnard	737	614.2	576.4	535	93.8	87.1	35	44
Bass	1,274	1,063.2	998.1	971	93.9	91.3	36	42
Beale	1,591	1,391.5	1,308.8	1,396	94.1	100.3	35	45
Beaubien	990	839.5	783.9	805	93.4	95.9	17	42
Beidler	766	677.7	633.3	595	94.2	37.3	51	44
Belding	931	833.3	799.9	755	96.0	90.5	28	41
Bismarck	1,094	1,004.7	975.2	969	97.1	96.4	42	42

TABLE VIII—Continued.

SCHOOLS.	Enrollment.	Average Daily Member-ship.	Average Daily Attendance.	Promotions.	Per Cent of Attendance.	Per Cent of Promotions.	Non-Promotions.	Average Number of Pupils to Teacher.
Blaine	1,479	1,268.1	1,210.8	1,245	95.5	98.2	42	42
Bradwell	1,107	946.3	895.2	881	94.6	93.1	45	42
Bramard	802	660.9	621.2	557	94.0	84.3	25	42
Brennan	340	294.2	276.8	256	93.8	87.0	7	42
Brentano	1,600	1,404.5	1,346.1	1,421	95.8	101.2	6	44
Brown	1,364	1,093.9	1,059.3	1,060	96.8	96.9	44	45
Brownell	554	436.8	406.2	387	93.1	88.6	12	42
Bryant	1,601	1,423.6	1,376.4	1,393	96.7	97.9	23	42
Bryn Mawr	423	369.9	349.6	367	94.5	99.2	7	45
Burke	1,264	1,047.6	993.2	965	94.4	92.1	17	44
Burley	889	780.4	736.7	707	94.4	90.6	84	42
Burns	1,603	1,441.0	1,393.8	1,310	96.7	90.9	127	45
Burnside	1,018	841.8	791.1	766	94.0	91.0	70	42
Burr	1,903	1,523.7	1,455.5	1,600	94.9	104.3	31	40
Burroughs	570	464.4	430.3	410	92.8	88.3	6	42
Byford	1,062	912.0	862.6	678	94.5	74.3	60	41
Calhoun	1,110	902.9	851.1	879	94.2	97.3	51	40
Cameron	1,340	1,152.9	1,100.9	971	95.4	84.2	92	44
Carpenter	1,317	1,108.9	1,052.9	995	94.9	90.0	65	45
Carter Practice	1,591	1,271.5	1,208.5	1,280	95.0	100.7	27	47
Chalmers	1,458	1,300.1	1,196.0	1,293	92.0	99.5	79	47
Chase	941	806.0	757.1	727	93.9	90.3	.....	44
Chicago Lawn	708	620.1	582.8	506	94.0	81.1	30	44
Clarke	2,447	2,066.0	1,896.6	1,905	91.8	92.2	135	46
Clay	496	388.7	365.9	341	94.1	87.7	25	44
Cleveland	1,627	1,400.3	1,332.6	1,379	95.2	93.5	60	45
Colman	818	659.9	605.5	513	91.8	77.7	56	41
Columbus	1,470	1,370.7	1,291.8	1,139	94.2	83.1	196	44
Coonley	1,356	1,204.1	1,151.2	1,287	95.6	106.9	29	44
Cooper	924	773.0	737.9	683	95.5	88.4	47	39
Copernicus	1,356	1,150.9	1,087.1	1,009	94.5	87.7	58	42
Corkery	1,645	1,503.8	1,447.0	1,339	96.2	89.0	112	44
Cornell	1,330	1,131.5	1,056.5	992	93.4	87.7	66	42
Crerar	886	770.3	715.0	686	92.8	89.1	67	42
Curtis	1,058	884.8	847.0	792	95.7	89.5	50	42
Dante	1,854	1,544.1	1,467.9	1,433	95.1	92.8	24	42
Darwin	1,294	1,123.5	1,075.0	1,028	95.3	91.1	71	42
Davis	713	617.5	583.7	482	94.4	78.1	50	45
Delano	836	723.8	689.6	442	93.5	61.1	15	48
Dewey	978	851.6	801.9	743	94.2	87.2	37	42
Doolittle	1,304	1,019.4	951.4	832	93.3	86.5	51	39
Dore	1,119	844.4	789.4	531	93.5	62.9	69	32
Douglas	1,307	925.1	856.2	803	92.5	86.8	26	41
Drake	1,191	907.9	837.5	825	92.3	90.9	36	42
Drummond	1,078	894.9	837.3	850	93.6	95.0	44	45
Dunning	462	409.4	382.6	410	93.5	100.0	6	26
Earle	1,268	1,109.9	1,040.8	981	93.7	88.4	32	45
Emerson	603	477.9	445.6	399	93.2	83.5	46	39
Emmet	758	660.9	633.4	658	95.8	99.6	26	46
Ericsson	985	841.0	794.1	785	94.4	93.3	28	42
Everett	867	756.2	715.5	676	94.6	89.4	11	44
Fallon	817	633.4	573.5	552	90.5	87.1	16	48
Fallon (Crippled Children)	57	45.6	42.0	40	94.3	87.7	.....	23
Farragut	1,444	1,300.7	1,259.7	1,090	96.8	82.8	124	42
Farren	1,083	838.0	772.0	784	90.9	93.5	28	40

TABLE VIII—Continued.

SCHOOLS.	Enrollment.	Average Daily Membership.	Average Daily Attendance.	Promotions.	Per Cent of Attendance.	Per Cent of Promotions.	Non-Promotions.	Average Number of Pupils to Teacher.
Felsenthal								
Field								
Fiske								
Forestville								
Foster								
Franklin								
Froebel								
Fuller								
Fulton								
Gage Park								
Gallistel								
Garfield								
Gary								
Gladstone								
Goethe								
Goodrich								
Goudy								
Graham								
Grant								
Gray								
Greeley								
Greene								
Gresham								
Haines Practice								
Hamilton								
Hamline								
Hammond								
Hancock								
Hanson Park—Mont Clare								
Harper								
Harvard								
Haugan								
Haven								
Hawthorne								
Hayes								
Hart								
Healdley								
Healy								
Hedges								
Hendricks								
Henry								
Herr								
Holden								
Holmes								
Howe								
Howland								
Irving								
Irving Park								
Jackson								
John								
Jefferson								
Jenner								
Jirka								
Jones								
Jungman								
Juvenile Detention School								

TABLE VIII—Continued.

SCHOOLS.	Enrollment	Average Daily Membership.	Average Daily Attendance.	Promotions.	Per Cent of Attendance.	Per Cent of Promotion.	Non-Promotion.	Average Number of Pupils to Teacher.
Keeler Avenue	487	421.7	398.5	318	94.5	75.4	18	45
Keith	574	442.3	412.2	374	93.4	84.5	29	39
Kenwood	700	560.2	529.0	533	94.6	95.1	56	33
Kershaw	1,443	1,226.5	1,167.0	1,119	95.1	91.2	46	40
Key	720	611.2	582.2	609	95.3	99.6	20	42
King	678	591.3	558.4	480	94.4	81.1	48	38
Kinzie	673	478.2	447.3	435	93.6	91.0	36	40
Kniekerbocker	768	618.7	587.7	509	95.0	82.3	33	44
Kohn	1,245	1,036.8	980.4	997	94.5	96.1	36	43
Komensky	1,259	1,087.9	1,040.1	880	95.5	81.7	62	39
Kosciuszko	1,328	996.5	922.5	927	92.6	93.0	49	45
Kozminski	1,084	869.2	821.8	798	94.5	91.8	33	34
La Fayette	2,008	1,754.3	1,673.1	1,690	95.4	96.3	65	42
Langland	943	763.5	728.8	808	95.4	105.8	29	43
La Salle	925	734.8	699.9	626	95.3	85.2	50	37
Lawson	2,537	2,055.8	1,968.3	1,820	95.7	88.5	47	45
Lewis-Champlin	1,159	964.7	907.1	920	94.2	95.4	33	40
Libby	1,317	1,136.8	1,083.1	1,073	95.3	94.4	15	43
Lincoln	1,107	911.9	873.3	805	95.8	88.3	33	41
Linne	1,022	748.9	725.4	685	96.9	91.5	7	42
Lloyd	1,031	936.2	879.2	921	92.9	98.4	63	46
Logan	963	758.1	721.9	738	95.2	97.4	11	40
Longfellow	932	748.5	705.3	816	94.2	109.0	28	44
Lowell	1,319	1,127.4	1,077.2	1,117	95.5	99.1	33	45
Madison	847	713.4	671.3	653	94.1	91.5	34	39
Manierre	916	772.4	728.4	757	94.3	98.0	35	44
Mann	905	724.9	673.6	596	92.9	82.2	57	41
Marquette	1,749	1,582.4	1,453.0	1,534	91.8	97.0	72	44
Marsh	557	457.4	428.6	442	93.7	96.6	14	42
Marshall	670	590.8	566.2	536	95.8	99.2	20	43
May	667	541.7	509.6	500	94.1	92.3	19	43
Mayfair	464	420.9	399.7	409	94.9	97.2	18	38
McAllister	642	518.5	481.0	469	92.8	90.5	27	42
McClellan	866	695.4	656.1	615	94.3	88.4	54	40
McCormick	1,440	1,307.1	1,266.1	1,149	96.8	87.9	64	43
McCosh	1,427	1,153.0	1,086.2	1,035	94.2	90.0	54	40
McLaren	2,048	1,708.1	1,588.7	1,468	93.0	85.9	102	45
McPherson	1,104	963.8	919.4	968	95.4	100.4	34	43
Medill	1,063	918.9	895.3	809	97.4	88.0	40	45
Mitchell	1,923	1,607.3	1,505.0	1,278	93.6	79.5	154	46
Monroe	1,597	1,332.4	1,266.9	1,348	95.1	101.2	44	45
Montefiore	1,011	847.6	815.1	681	96.2	80.3	118	43
Moos	990	892.5	859.5	765	96.3	85.7	79	44
Morgan Park	835	695.9	654.1	708	94.0	101.7	10	38
Morris	892	748.3	707.4	687	94.5	91.8	48	40
Morse	941	809.5	766.5	696	94.7	86.0	38	40
Moseley	793	573.7	531.0	487	88.2	85.0	26	35
Motley	1,199	963.3	902.7	951	93.7	98.7	34	43
Mozart	1,378	1,175.0	1,126.3	1,164	95.9	99.1	12	44
Mulligan	988	808.6	762.7	799	94.3	98.8	31	41
Nash	1,314	1,180.3	1,119.0	1,072	94.8	90.8	61	43
Nettelhorst	1,068	930.2	890.4	945	95.7	101.6	42	41
Newberry	1,271	1,088.4	1,041.8	1,095	95.7	100.6	27	45
Nixon	1,590	1,386.0	1,312.3	1,376	94.6	99.0	74	45
Nobel	1,391	1,254.3	1,196.8	1,185	95.4	94.5	49	44
Norwood Park	429	339.8	319.6	321	94.1	94.0	17	36

TABLE VIII—Continued.

SCHOOLS.	Enrollment	Average Daily Membership.	Average Daily Attendance.	Promotions.	Per Cent of Attendance.	Per Cent of Promotions.	Non-Promotions.	Average Number of Pupils to Teacher.
Oakland	712	565.8	538.5	503	95.2	88.9	54	40
Ogden	727	544.1	504.0	564	92.6	100.4	2	39
Oglesby	977	861.5	813.7	840	94.4	97.5	33	44
Otis	1,526	1,218.1	1,145.7	1,060	94.5	87.0	110	44
Parental	763	813.2	813.2	372	100.	118.7		33
Parker Practice	1,361	1,162.8	1,101.1	983	94.7	84.5	10	39
Parkman	884	751.5	717.5	632	95.5	90.7	30	39
Park Manor	996	877.1	831.3	789	94.3	90.0	74	41
Parkside	626	536.3	502.7	482	93.7	90.0	26	42
Peabody	1,053	815.4	747.6	709	91.6	86.9	30	47
Penn	1,882	1,545.4	1,470.9	1,516	95.2	92.1	47	45
Pickard	1,445	1,153.7	1,080.4	984	93.6	85.3	16	42
Plamondon	684	623.7	595.3	573	95.5	91.9	17	43
Poe	470	404.2	387.6	348	95.9	86.1	47	44
Prescott	1,051	815.3	762.5	673	93.5	82.5	39	42
Pulaski	866	726.5	688.6	716	94.7	98.5	34	43
Pullman	1,054	902.8	857.3	822	95.0	91.1	33	42
Raster	1,329	1,137.7	1,116.0	1,267	93.1	106.7	24	42
Ravenswood	1,048	902.9	850.2	953	94.2	105.5	26	42
Ray	1,191	914.6	851.0	812	93.0	88.8	66	41
Raymond	920	706.5	655.5	647	92.8	91.6	9	37
Revere	644	548.0	511.0	503	94.1	93.5	5	41
Rogers	1,941	1,715.3	1,585.6	1,911	92.4	111.4	64	47
Ryder	439	369.6	347.5	302	94.0	81.7	5	44
Ryerson	1,189	1,019.0	966.5	922	94.8	90.5	33	41
Sawyer Avenue	631	544.7	506.7	485	93.0	89.0	40	43
Scammon	525	420.0	398.2	361	94.3	86.0	32	40
Scanlan	1,324	1,118.8	1,048.8	975	93.7	87.1	45	44
Schiller	1,377	1,114.7	1,072.8	1,019	96.3	91.4	62	42
Schley	1,781	1,529.4	1,441.2	1,520	94.2	99.4	91	46
Schnelder	964	823.3	774.7	718	94.1	87.2	18	43
Schools for the Blind..	(44)	(38.5)	(36.8)	(30)	(94.9)	(77.2)		
Scott	820	662.5	623.3	632	94.1	95.4	15	41
Seward	1,227	870.2	799.9	744	91.9	85.5	62	39
Sexton	804	599.0	559.8	589	93.5	98.3	22	41
Shakespeare	813	665.3	626.4	647	94.2	97.2	14	40
Sheldon	418	300.6	286.3	291	95.2	96.8	3	36
Sheridan, Mark	1,172	958.9	900.9	846	93.9	88.2	31	40
Sheridan, Phil	1,509	1,204.0	1,120.7	1,063	92.1	88.3	12	42
Sherman	1,067	885.3	823.0	779	92.0	83.0	45	44
Sherwood	955	869.8	813.4	814	94.1	92.6	26	42
Shields	1,251	1,014.4	939.3	694	92.6	68.4	115	43
Sixty-second Place	286	249.2	235.6	208	94.5	83.4	10	33
Skinner	1,248	923.7	850.5	737	92.1	80.0	16	42
Smyth	1,943	1,452.4	1,335.8	1,306	92.0	90.0	37	40
South Deering	342	288.5	273.1	274	96.4	95.0	59	42
Spalding	265	160.9	151.9	116	94.4	72.1	9	20
Spencer	646	552.9	525.0	540	95.	97.7	22	43
Springfield Avenue	308	274.3	262.4	295	95.6	107.5	24	43
Spry	1,531	1,336.0	1,272.7	1,110	95.2	83.1	92	44
Stewart	1,623	1,335.0	1,268.5	1,324	95.0	99.1	35	43
Stowe	1,326	1,143.2	1,106.6	1,117	96.7	97.7	41	47
Sullivan	1,030	826.7	772.2	686	93.4	82.0	34	42
Sumner	1,319	1,004.2	944.4	933	94.3	97.9	23	39
Swift	38	303.7	193.6	297	95.0	145.3	3	36
Swing	1,150	913.3	875.7	722	95.3	79.1	35	41

TABLE VIII—Concluded.

SCHOOLS.	Enrollment	Average Daily Membership.	Average Daily Attendance.	Promotions.	Per Cent of Attendance.	Per Cent of Promotions.	Non-Promotions.	Average Number of Pupils to Teacher.
Talcott	1,614	1,369.5	1,232.3	1,135	92.6	82.9	27	41
Taylor	769	667.2	650.0	585	97.4	87.7	10	42
Tennyson	942	729.1	672.6	777	92.3	106.6	1	44
Thomas	520	414.2	398.1	343	96.1	82.8	59	40
Thorp, J. N.	886	692.3	651.9	510	94.0	72.5	72	38
Thorp, Ole A.	729	636.0	603.9	671	95.0	105.5	15	41
Throop	868	723.1	687.2	633	95.0	88.2	29	43
Tilden	827	606.1	563.1	528	92.9	87.1	15	42
Tilton	1,045	891.3	844.5	891	94.7	100.0	24	43
Trumbull	1,748	1,536.5	1,471.8	1,644	95.9	107.0	67	44
University Avenue.....	518	408.1	386.7	407	94.7	99.7	8	38
Vanderpoel	385	321.7	298.2	325	92.7	101.0	18	42
Van Vlissingen.....	1,593	1,415.6	1,330.2	1,422	94.0	100.5	33	46
Von Humboldt	2,553	2,192.5	2,054.8	2,285	93.7	104.2	88	46
Wadsworth	1,053	898.1	847.4	896	94.4	99.8	58	42
Walsh	1,151	952.4	901.6	734	94.8	77.1	44	41
Ward	1,006	839.9	775.1	744	92.3	88.6	47	42
Warren	532	452.4	440.2	409	97.3	90.4	14	37
Washburne	1,625	1,328.1	1,235.0	1,187	93.0	98.4	67	38
Washington	1,366	1,134.0	1,075.8	934	94.8	82.4	194	38
Waters	1,059	912.4	868.5	826	95.2	90.5	23	30
Webster	850	669.4	633.8	581	94.6	86.3	13	42
Wells	1,341	1,095.0	1,029.6	881	94.9	80.5	30	41
Wentworth	1,545	1,224.1	1,246.1	1,267	94.1	95.7	74	44
West Pullman.....	1,394	1,143.4	1,094.0	1,196	95.7	104.6	27	43
Whitney	1,613	1,424.1	1,366.1	1,226	95.9	86.1	53	46
Whittier	965	728.5	694.9	797	95.3	109.4	36	43
Wicker Park	1,770	1,550.7	1,446.4	1,508	93.3	97.2	63	46
Willard	1,460	1,177.3	1,104.2	1,153	93.3	98.0	35	40
Worthy	425	104.4	99.2	21	95.0	20.1	.....	19
Yale	1,120	949.5	876.7	847	92.3	89.2	18	40
Yates	1,049	954.3	912.0	929	95.5	97.3	21	44
Totals.....	32,248	276,558.2	261,447.7	251,089	94.2	90.8	12,035	..

The following schools were opened on the dates given below :—

Morgan Park High (annexed, May, 1914).

Morgan Park Elementary (annexed, May, 1914).

Hersi—January, 1914.

Swift—February, 1914.

NOTE—The average membership per teacher in the elementary grades has been found by taking the membership in elementary classes for June, 1914, and dividing by the number of teachers in charge of elementary classes at that time

TABLE IX.

Department of Child Study—1913-14.

EXAMINATION OF CHILDREN.

New cases in which the chief problem was found to be—

1. Backwardness in Studies.....	154
2. Subnormality	579
3. Feeble-Mindedness	74
4. Crippled	70
5. Truancy and Incurability.....	77
6. Truancy and Incurability (Parental School).....	526
7. Blindness or Defective Vision.....	144
8. Deafness or Defective Hearing.....	74
9. Constitutional and Nervous Defects, and Physical Disorders.....	541
10. Speech Disorders (persistent cases only).....	42
11. Epilepsy (exclusion cases only).....	15
12. Normal Pupils Concerning Whom Special Educational Advice was desired	36
Total Number of Children Examined.....	2,332
Number of Re-examinations.....	300
Total Number of Examinations.....	3,132

PHYSICAL EXAMINATIONS OF TEACHERS.

During the school year there were 1,217 physical examinations given to adults; that is, those entering Normal College or coming into the educational system by certificate.

In addition to the more intimately affiliated agencies and departments of the Board of Education or Municipal government, reference may be made to those organizations which are charitable and philanthropic in character who have referred children to this Department for advice:

The Jewish Aid Society.
The Mental Hygiene Association.
Jewish Home for the Friendless.
The United Charities.
Presbyterian Hospital.
University of Chicago Settlement.
Northwestern Settlement.
Chicago Nursery and Half Orphanage Asylum.
Hebrew Institute.
Hull House.
Elizabeth McCormick Open Air School.
Visiting Nurses' Association.

Primary Principals	6
High School Teachers.....	154
Elementary Teachers	337
Kindergarten Teachers	75
Physical Education Teachers.....	25
Household Arts Teachers.....	19
Manual Training Teachers.....	14
Teachers of Deaf.....	5
Family Instructors (Parental School).....	2
Teachers of Music.....	6
Vocational Guidance	5
Child-Study Assistant	1
Normal College Entrants.....	193
Normal College Graduates.....	201
Former Teachers	114
Total.....	1,217

TABLE X.
Statistics of Divisions for the Deaf.

Number enrolled	299
Number belonging June 26.....	262
Average daily attendance.....	247.4
Number of divisions.....	80
Number of teachers.....	80

TABLE XI.
Department of Defective Speech.

Number of children examined.....	1,839
Number of children examined, found not defective in speech.....	821
Number of new cases in old schools.....	1,008
Number having major defects.....	551
Number having minor defects.....	901
Number needing surgical or medical aid.....	314

TABLE XII.
Statistics of Special Divisions.

	Subnormal	Truant	Anemic
Number of Divisions.....	47	508	21
Admitted	1,265	508	777
Belonging	836	210	517
Returned to Grades.....	218	122	198

TABLE XIII.**Vacation Schools—July and August, 1913.**

Number of Regular Schools.....	21
Number of Special Schools.....	10
Teachers and Cadets—Men, 59; Women, 352; Total.....	411
Enrollment of Pupils—Boys, 7,879; Girls, 8,135; Total.....	16,014
Attendance of Pupils—Boys, 5,295; Girls, 5,439; Total.....	10,734
Average Number on Excursions—Boys, 4,390; Girls, 4,723; Total.....	9,113

Expenditures.

Teachers' salaries	\$23,885.85
Engineers' and Janitors' salaries.....	4,104.70
Excursions	2,306.00
Bus Hire—Crippled children.....	368.50
Supplies	2,399.79
Total.....	<u>\$33,564.84</u>

Vacation Schools—July and August, 1914.

Number of Regular Schools.....	21
Number of Special Schools.....	8
Teachers and Cadets—Men, 57; Women, 365; Total.....	422
Enrollment of Pupils—Boys, 8,470; Girls, 8,744; Total.....	17,214
Attendance of Pupils—Boys, 5,668; Girls, 5,921; Total.....	11,589

TABLE XIV.
Evening Schools.

ENROLLMENT, ATTENDANCE, ETC.**HIGH SCHOOLS.**

Teachers.	Men.	Women.	Total.
Number employed at opening of school.....	184	101	285
Number subsequently employed.....	15	15	30
Total number, including principal.....	213	117	330
Number at close, including principal.....	183	102	285
Total number pupils enrolled.....	<u>7,498</u>	<u>5,120</u>	<u>12,618</u>
Attendance of pupils—			
Number attending—			
For 70 evenings or more.....	868	347	1,215
For 60 evenings and less than 70.....	1,109	469	1,578
For 50 evenings and less than 60.....	898	447	1,345
For 40 evenings and less than 50.....	685	444	1,129
For 30 evenings and less than 40.....	1,125	882	2,007
For 20 evenings and less than 30.....	1,115	806	1,921
For less than 20 evenings.....	1,703	1,725	3,428
Total.....	<u>7,498</u>	<u>5,120</u>	<u>12,618</u>

ELEMENTARY SCHOOLS.

Teachers.	Men.	Women.	Total.
Number employed at opening of school.....	56	485	541
Number subsequently employed.....	2	90	92
Total number, including principal.....	78	584	662
Number at close, including principal.....	64	380	444
Total number pupils enrolled.....	<u>18,009</u>	<u>7,344</u>	<u>25,353</u>
Attendance of pupils—			
Number attending—			
For 70 evenings or more.....	1,878	480	2,358
For 60 evenings and less than 70.....	1,999	648	2,647
For 50 evenings and less than 60.....	2,096	686	2,782
For 40 evenings and less than 50.....	2,319	800	3,119
For 30 evenings and less than 40.....	2,928	1,156	4,084
For 20 evenings and less than 30.....	3,233	1,470	4,703
For less than 20 evenings.....	4,056	2,159	6,215
Total.....	<u>18,009</u>	<u>7,344</u>	<u>25,353</u>

TABLE XV.**Amount Expended for Evening Schools for School Year.**

Salaries of principals and teachers.....	\$166,430.50
Salaries of engineers and janitors.....	18,394.29
Fuel and light.....	20,090.93
Custodians of tool rooms.....	286.50
Printing	1,517.83
Rental of typewriters.....	8,443.77
Rental of sewing machines.....	214.50
Supplies	10,392.20
Total.....	\$221,370.52

Cost Per Pupil.

On total enrollment.....	\$ 5.82
On average attendance.....	11.64
Average cost per pupil per evening (76 evenings).....	.15

TABLE XVI.
Nativity—Evening Schools.

FOREIGN BORN ONLY.

Nationality.	Elementary Schools.			High Schools.		
	Men.	Women.	Total.	Men.	Women.	Total.
Albanian	4	.....	4	.....	.....	.....
Argentinian	1	.....	1	.....	.....	.....
Armenian	67	2	69	1	1	2
Austrian	712	185	897	122	20	142
Belgian	68	17	85	6	2	8
Bohemian	1,063	375	1,448	73	17	90
Brazilian	1	.....	1	.....	1	1
Bulgarian	45	8	53	.....	.....	.....
Canadian	9	23	32	50	89	80
Chinese	11	.....	11	1	8	4
Croatian	60	5	65	1	.....	1
Cuban	1	.....	1	1	1	2
Danish	212	78	290	28	12	40
English	55	46	101	102	71	173
Filipino	4	.....	4	.....	.....	.....
Finnish	42	13	55	1	2	3
French	48	12	60	18	5	23
Galician	1	.....	1	.....	.....	.....
German	1,888	562	1,950	363	169	532
Greek	597	22	619	24	1	25
Hollandish	166	53	219	41	18	59
Hungarian	440	139	579	16	18	34
Irish	126	84	210	157	113	270
Italian	1,915	170	2,085	84	8	92
Jamaican .....	.....	.....	.....	2	.....	2
Japanese	4	1	5	.....	.....	.....
Lettish .....	.....	.....	.....	2	.....	2
Liberian .....	.....	.....	.....	1	.....	1
Lithuanian	787	117	904	17	.....	17
Manx .....	.....	.....	.....	2	.....	2
Mexican	13	1	14	5	.....	5
Norwegian	285	140	375	59	17	76
Persian	6	.....	6	1	1	2
Polish	2,800	595	2,895	106	17	123
Porto Rican	1	.....	1	.....	.....	.....
Portuguese	1	.....	1	.....	.....	.....
Roumanian	68	18	86	25	9	34
Russian	3,443	1,625	5,068	252	88	340
Scotch	23	6	29	46	27	73
Servian	14	1	15	4	1	5
Spanish	36	1	37	2	1	3
Swedish	728	266	994	187	53	240
Swiss	15	8	18	15	7	22
Syrian	18	7	25	1	.....	1
Slavonic	20	4	24	2	.....	2
Turkish	12	.....	12	.....	.....	.....
Welsh .....	.....	.....	.....	6	8	9
Total Foreign Born	14,765	4,579	19,344	1,876	725	2,601
Born in United States...	3,244	2,765	6,009	5,622	4,895	10,017
Total	18,009	7,344	25,353	7,498	5,120	12,618

TABLE XVII.

**Place of Birth of Children Receiving Age and School Certificates,
from July 1, 1913 to July 1, 1914.**

Country	Boys.	Girls.	Total.
Africa	1	3	4
Alaska	1	....	1
Armenia	1	....	1
Australia	1	....	1
Austria-Hungary	246	171	417
Azores Islands .....	....	1	1
Belgium	6	4	10
Bohemia	91	87	178
Bulgaria	1	2	3
Canada	15	3	18
Croatia .....	....	1	1
Cuba	2	....	2
Denmark	10	1	11
Egypt	1	....	1
England	83	59	142
Finland	2	2	4
France	6	1	7
Germany	99	65	164
Greece	9	9	18
Holland	13	10	23
Ireland	12	5	17
Italy	220	220	440
Lithuania	1	1	2
Norway	32	18	50
Palestine .....	....	1	1
Poland	53	30	83
Roumania	26	25	51
Russia	532	457	1,039
Scotland	13	7	20
Servia .....	....	1	1
Sicily	7	2	9
Slavonia	2	1	3
South America	5	6	11
Sweden	32	19	51
Switzerland	1	....	1
Turkey	1	3	4
United States	6,331	3,481	9,812
* Unclassified	735	276	1,011
Total	8,661	4,973	13,633

*(Including duplicates.)

TABLE XVIII.

Age and School Certificates Issued Children in the Various Grades,
from July 1, 1913 to July 1, 1914.

	Boys.	Girls.	Total.
Grade 1.....	18	12	30
Grade 2.....	33	25	58
Grade 3.....	138	114	252
Grade 4.....	403	292	695
Grade 5.....	1,018	566	1,584
Grade 6.....	1,466	881	2,347
Grade 7.....	1,657	976	2,633
Grade 8.....	2,501	1,533	4,034
Grade 9.....	514	177	691
Grade 10.....	121	74	195
Grade 11.....	21	11	32
Grade 12.....	1	....	1
Evening School	85	85	70
* Unclassified	735	276	1,011
Total	8,661	4,972	13,633

*(Including duplicates.)

TABLE XIX.

Cost of Maintaining all Classes of Schools for the School Year.

	Average Daily Membership.	For Teachers' Salaries.	For Fuel, Light, Janitors, Supplies and other Expenses.	Total Cost.
Elementary Schools (1)...	254,403.8	\$7,565,647.66	\$2,076,243.57	\$ 9,641,891.23
High Schools (2).....	21,313.5	1,580,514.13	283,957.84	1,864,471.97
Chicago Normal College...	494.2	106,133.00	28,644.62	134,777.62
Parental School	313.2	33,965.19	56,381.98	90,347.17
John Worthy School.....	104.4	15,849.33	10,012.04	25,867.37
Schools for the Deaf.....	261.8	88,467.13	4,510.99	42,078.12
Schools for the Blind.....	88.8	6,367.50	1,022.42	7,389.92
Schools for Crippled Chil- dren	206.5	12,734.25	15,013.49	28,047.74
Schools for Apprentices(3)	234.1	3,824.00	820.84	4,645.74
Vacation Schools (4).....	10,734.0	23,885.85	9,043.63	33,831.48
Evening Schools (4).....	19,023.4	166,430.50	54,040.02	221,370.52
Social Centers.....	.....	18,735.50	7,661.63	26,397.13
Summer High Schools....	.....	15,015.75	.....	15,015.75

Total expenditures for
all educational pur-
poses

\$9,587,570.69 \$2,550,061.07 \$12,137,631.76

(1) Includes kindergartens and all special studies, as well as items not charged to other appropriations.

(2) Includes Junior College and Pre-vocational pupils.

(3) Carpenters' Apprentice Schools only.

(4) Average attendance.

TABLE XX.

**Cost Per Pupil of Maintaining the Several Classes of Schools,
Showing Proportion Paid for Teachers' Salaries and for
other Expenses for the School Year.**

(Based on average daily membership.)

	Average Daily Membership.	For Salaries of Teachers.	For Janitors, Fuel, Sup- plies, Re- pairs and all Other Operating Expenses.	Total Cost per Pupil.
Elementary Schools (1).....	254,403.8	\$ 29.74	\$ 8.16	\$ 37.90
High Schools	21,313.5	74.16	13.32	87.48
Chicago Normal College (2).....	494.2	214.76	57.06	272.72
Parental School	313.2	108.44	180.02	288.46
John Worthy School.....	104.4	151.81	95.96	247.77
Schools for the Deaf.....	261.3	147.21	17.26	164.47
Schools for the Blind.....	38.8	164.11	26.35	190.46
Schools for Crippled Children.....	206.5	61.67	77.06	138.73
Apprentice Schools (3).....	234.1	16.34	8.50	10.84
Day Schools (entire system).....	276,558.2	33.86	8.06	42.82
Evening Schools (4).....	19,023.4	8.75	2.89	11.64
Vacation Schools (4).....	10,734.0	2.22	.93	3.15

(1) Including Kindergartens and all special studies, as well as items not charged to other appropriations.

(2) Includes cost of College Extension, but not extra salaries paid critic teachers in Practice Schools.

(3) Average for three months, Carpenters' School only.

(4) Average Daily Attendance.

TABLE XXI.

**Cost of Maintaining Kindergartens and Special Studies in the
Elementary Schools for the School Year.**

	For Salaries of Teachers.	For Supplies, Equipment and Other Expenses.	Total Cost for the Year.
Kindergartens	\$308,710.46	\$ 9,470.24	\$318,180.70
Manual Training (1).....	119,675.14	60,488.72	180,163.86
Household Arts (2).....	113,864.28	27,391.06	141,255.34
Art (3).....	19,638.00	17,387.40	37,025.40
Music (3).....	11,887.50	2,888.17	14,775.67
Physical Education (3).....	52,686.03	2,818.24	55,504.27
Defective Speech	7,823.25	.....	7,823.25
German (4).....	8,333.00	280.01	8,613.01
Total.....	\$642,621.66	\$120,723.84	\$763,345.50

(1) Boys of Sixth, Seventh and Eighth Grades.

(2) Girls of Sixth, Seventh and Eighth Grades.

(3) All pupils in Grades 1 to 8.

(4) Optional for pupils Fifth to Eighth Grades.

TABLE XXII.

Cost Per Pupil of Kindergartens and Special Studies in Elementary Schools for the School Year.

(Based on average daily membership.)

	Average Daily Mem- bership of Classes.	For Teachers' Salaries.	For Sup- plies, Jani- tor Service and other Expenses.	Total Cost for each Pupil in Class.
Kindergartens	16,034.7	\$ 19.25	\$.59	\$ 19.84
Manual Training (1)	22,956.3	5.21	2.63	7.84
Household Arts (2)	28,372.6	4.01	.96	4.97
Art (3)	237,333.8	.083	.073	.156
Music (3)	237,333.8	.05	.012	.062
Physical Education (3)	237,333.8	.221	.012	.233
German (4)	14,965.2	.557	.019	.576

- (1) Boys of Sixth, Seventh and Eighth Grades.
(2) Girls of Sixth, Seventh and Eighth Grades.
(3) All pupils in Grades 1 to 8.
(4) Optional for pupils in Fifth to Eighth Grades.

TABLE XXIII.

Nonpromotions, June 26, 1914, of Pupils Who Have Been a Year in the Grade.

	Boys.	Girls.	Total.
Grade 1	1,948	1,378	3,326
Grade 2	875	562	1,437
Grade 3	940	738	1,678
Grade 4	947	670	1,617
Grade 5	913	660	1,573
Grade 6	728	513	1,241
Grade 7	469	362	831
Grade 8	192	140	332
Total	7,012	5,023	12,035

TABLE XXIV.
Statistics of Membership, 1906-1914.

	1905-06	1907-08	1909-10	1911-12	1913-14
Average Daily Membership by Grades--Primary Grades--					
First Grade	43,560.8	40,162.0	39,002.7	38,800.2	45,906.9
Second Grade	34,830.4	33,308.1	30,877.6	32,526.4	32,415.7
Third Grade	32,514.4	33,522.1	34,616.8	32,413.9	32,721.8
Fourth Grade	30,009.8	29,989.8	31,300.1	30,835.0	30,712.7
Total, Primary Department	140,715.4	137,062.0	134,947.2	134,685.5	141,847.1
Average Daily Membership by Grades--Grammar Grades--					
Fifth Grade	28,056.8	27,923.5	28,571.8	29,444.8	29,543.3
Sixth Grade	22,510.6	22,871.5	23,254.0	24,618.2	26,006.7
Seventh Grade	17,643.6	18,617.1	18,914.3	19,633.7	21,342.3
Eighth Grade	12,939.2	14,846.1	15,002.6	16,075.0	17,904.4
Total, Grammar Department	81,180.2	84,159.2	86,842.7	89,771.7	95,486.7
Kindergarten	9,401.5	9,853.9	10,706.3	11,838.2	16,084.7
Sub-Normal and Truants					913.1
Pre-vocational					447.9
Ungraded Adults					122.2

TABLE XXV.
Statistics of Membership, 1906-1914.

	1905-06	1907-08	1909-10	1911-12	1912-14
Average Daily Membership by Grades—High Schools—					
Chicago Normal College.....	308.4	501.6	594.0	514.7	494.3
Junior College.....				35.7	114.0
Ninth Grade.....	5,843.9	6,217.7	7,519.8	8,020.0	6,069.3
Tenth Grade.....	3,339.6	3,322.7	4,224.0	3,029.3	4,107.0
Eleventh Grade.....	1,928.2	2,158.0	2,405.3	2,891.4	2,920.8
Twelfth Grade.....	1,812.6	1,515.0	1,723.3	2,172.4	2,509.7
					85.6
					3,466.9
					1,554.4
	12,024.6	15,213.4	15,057.6	19,533.6	20,751.6
Average Daily Membership—Special Schools—					
Schools for Deaf.....	190.6	206.5	223.2	241.7	251.3
Schools for Blind.....	27.0	24.6	31.5	42.4	38.3
Schools for Crippled Children.....	122.8	110.6	145.7	120.5	205.5
Parental Schools.....	212.0	233.2	261.9	312.7	313.2
Total.....	233.5	186.5	233.5	224.0	224.1
Day Schools.....	244,230.7	245,249.5	501.6	255,967.1	276,853.2
In.....	4,073.3	4,519.2	230.3	2,913.4	15,613.6

TABLE XXVI.
Pupils in Half-Day Divisions and in Rented Rooms.

At Close of June	Pupils in Half-Day Divisions	Pupils in Rented Rooms	Total	Decrease From Previous Year	Increase Over Previous Year
1906	8,339	3,613	11,952	4,812	.....
1908	6,965	1,854	8,819	1,615	.....
1910	3,206	2,623	5,829	4,237	.....
1912	4,345	1,117	5,462	.....	1,996
1914	5,584	1,786	7,370	1,181	.....
Decrease in ten years.....	6,388	3,902	10,290		

The gain in school accommodations over increase in school attendance is shown by taking one-half of the decrease in attendance in half-day divisions and adding the decrease in attendance in rented rooms.
Net gain in 10 years—3,194+3,902=7,096.

TABLE XXVII.
Suspensions.

	1906	1908	1910	1912	1914
Temporary	1,376	955	639	248	157
Special,.....	786	218	142	121	86

TABLE XXVIII.
Per Cent. of Promotions Based Upon Average Daily Membership.

	1906	1908	1910	1912	1914
High Schools	69.8	68.7	70.2	73.0	77.9
Grades 5 to 8.....	84.4	85.7	85.3	87.9	92.2
Grades 1 to 4.....	82.2	89.0	89.2	93.0	92.9
Kindergartens	75.7	79.1	81.1	85.4	87.9

TABLE XXIX.**Percentage of Pupils in High and Elementary Grades,
and Cost Per Pupil.**

(Computed on total average membership in high and elementary schools.)

Year	Per Cent. in Primary Grades ($\frac{1}{4}$)	Per Cent. in Grammar Grades ($\frac{3}{4}$)	Per Cent. in High Schools	Cost per Pupil in Whole System
1905-06.....	60.15	34.70	5.15	30.02
1907-08.....	58.47	33.85	5.63	32.47
1909-10.....	56.9	36.5	6.6	36.11
1911-12.....	55.5	37.0	7.5	39.61
1913-14 (1).....	51.3	34.7	7.5	*42.82

* Day Schools.

(1) The remaining 6.5 per cent. are in the Normal College, Kindergarten and Ungraded Classes.

TABLE XXX.**Comparative Statement of Cost Per Pupil of Maintaining Chicago
Normal College, High and Elementary Schools, Including
Teachers' Salaries, Janitor Service, Supplies, and
all Other Incidental Expenses.**

(Based on average daily membership.)

	1905-06	1907-08	1909-10	1911-12	1913-14
Chicago Normal College*.....	\$237.75	\$228.08	\$168.80	\$228.65	\$272.72
High Schools**.....	66.80	58.78	67.72	73.83	87.48
Technical High Schools.....	89.49	71.84	80.82	.....	.....
Elementary Schools.....	27.57	29.84	32.77	35.11	37.90

* Including cost of Normal Extension Work, but not including the extra cost of the practice schools.

** All classes of high schools computed together in 1911-12, 1913-14.

TABLE XXXI.**Comparative Statement of Cost Per Pupil of Maintaining Special
Schools, Including Teachers' Salaries, Janitor Service,
Supplies, and all other Incidental Expenses.**

(Based on average daily membership.)

	1905-06	1907-08	1909-10	1911-12	1913-14
Parental School.....	\$369.00	\$333.12	\$291.82	\$257.50	\$298.46
John Worthy School.....	30.43	95.42	215.74	178.06	247.77
Schools for the Deaf.....	118.27	124.03	136.53	139.63	164.47
Schools for the Blind.....	166.29	169.23	183.00	139.63	190.46
Schools for Crippled Children....	117.32	161.46	178.02	213.71	138.73
Evening Schools (cost per pupil per evening).....	.163	.152	.18	.16	.153

TABLE XXXII.

Comparative Statement of Cost Per Pupil of Maintaining Kindergartens and Special Studies in Elementary Schools.

(Based on average daily membership.)

	1905-06	1907-08	1909-10	1911-12	1913-14
Kindergartens	\$ 17.60	\$ 19.06	\$ 20.59	\$ 20.67	\$ 19.84
Manual Training (1).....	3.69	8.55	4.35	6.58	7.84
Household Arts (2).....	2.68	8.12	8.76	4.04	4.97
Art (3).....	.108	.11	.12	.136	.156
Music (3).....	.047	.06	.08	.079	.062
Physical Education (3).....	.059	.08	.20	.139	.233
German (4).....					.576

(1) Boys of Sixth, Seventh and Eighth Grades have lessons in Manual Training.

(2) Girls of Sixth, Seventh and Eighth Grades have lessons in Cooking and Sewing.

(3) All pupils in Grammar and Primary Grades have training in Art, Music and Physical Education.

(4) Optional for pupils in Fifth to Eighth Grades.

TABLE XXXIII.

Vacation Schools.

Year.	Number of Schools.	Enrollment.	Expenditures.
1908.....	13	10,687	\$24,582.00
1909.....	17	13,404	26,776.00
1910.....	20	17,219	82,575.00
1911.....	24	11,980	23,630.37
1912.....	31	13,458	80,255.96
1913.....	31	16,014	83,564.84

TABLE XXXIV.

Evening School Enrollment—Attendance and Expenditure for the Following Years.

Enrollment.			Average Attendance.	*Increase.	Expenditures.	Cost per Pupil per Evening.
High.	Elementary.	Total.				
1905-06.....		19,900	9,714		\$118,750.97	\$.16.2
1907-08.....	2,969	20,133	10,951	8.9%	133,040.08	.15.2
1909-10.....	5,289	19,988	11,369	0%	156,897.94	.18.
1911-12.....	9,532	27,652	14,609	7%	163,622.00	.16.
1913-14.....	12,618	37,971	19,023.4	7%	221,870.52	.15.8

* Every two years.

TABLE XXV.
Total Expenditures Charged to Educational Account for the Following Years.
 (Compiled from Annual Reports of the Committee on Finance.)

ELEMENTARY SCHOOLS.	1906-06	1907-06	1908-10	1911-12	1913-14
and Teachers, primary and of "Special" stud- items is given, including sal- aries:	\$4,587,382.16	\$ 4,923,432.91	\$ 5,616,880.88	\$ 6,144,808.93	\$ 6,902,002.50
Manual Training.....	165,518.30	187,868.04	220,453.53	245,130.09	312,180.70
Household Arts.....	62,727.65	54,243.71	80,560.98	106,709.13	180,183.86
Art.....	30,690.18	51,820.21	72,583.26	106,311.01	141,259.34
Music.....	23,978.84	24,894.35	26,869.55	30,618.91	37,025.40
Physical Education.....	10,207.82	13,433.24	17,260.69	17,717.10	14,775.67
Defective Speech.....	13,083.31	17,848.33	45,039.86	29,889.19	65,604.27
German.....				2,975.50	7,823.25
					8,613.01
Total cost of so-called "Special" studies.....	\$ 303,241.10	\$ 340,911.85	\$ 462,766.57	\$ 539,350.93	\$ 703,345.50
ITEMS OF GENERAL EXPENDITURE COUNTED IN TOTAL COST OF ELEMENTARY SCHOOLS.					
	\$ 536,978.76	\$ 633,912.83	\$ 669,437.06	\$ 788,357.28	\$ 919,712.98
	339,691.01	260,266.43	13,482.72	4,140.40	3,088.83
	285,710.71	266,918.98	308,111.37	871,094.49	417,617.78
	43,819.66	24,617.70	23,874.09		
	67,666.97	86,433.55	82,200.38	76,039.23	68,022.87
	17,319.76	13,234.00	17,416.64	16,321.04	12,323.00
	60,696.93	74,338.26	82,863.92	87,287.78	112,360.94
	24,761.14	38,138.96	52,162.44	59,394.03	69,876.72
	6,102.74				
	9,020.00	10,106.00	19,516.50	29,451.13	40,770.14
(2).....	7,812.50	8,009.66			
	2,846.45	1,498.44	14,987.03	15,523.00	37,607.23
	3,645.65	4,101.32	5,696.39	7,724.25	29,020.39
(3).....	32,500.08	22,509.08	32,710.09		10,503.79
	40,003.29	66,240.43	77,429.75	52,889.43	87,020.97
	20,662.96	18,031.55	21,898.96	20,275.54	24,465.98
	9,160.25	32,248.29	25,187.67	32,446.77	37,655.23

TABLE XXXV—Continued
Total Expenditures Charged to Educational Account for the Following Years.
(Compiled from Annual Reports of the Committee on Finance.)

ELEMENTARY SCHOOLS.	1905-06	1907-08	1909-10	1911-12	1913-14
Examining Board (4).....	8,409.50	7,528.74	11,132.08	11,132.88	15,850.14
Incidentals, office expenses, livery and misc. (4).....	16,192.05	44,275.97	43,808.02	33,574.06	40,133.37
Total of General Expenditures.....	\$1,483,088.41	\$ 1,624,401.00	\$ 1,501,915.89	\$ 1,612,207.86	\$ 1,976,543.28
Total Cost of Elementary Schools.....	\$6,375,771.67	\$ 6,807,745.88	\$ 7,581,563.34	\$ 8,206,462.72	\$ 9,641,891.23
Cost per pupil in Elementary Schools, based on average membership.....	\$ 27.57	\$ 28.84	\$ 32.77	\$ 35.11	\$ 37.90
(1) Rebuilding with 1909-10 repairs to buildings are charged to the Building Account. (2) Now charged to account of Schools for Crippled Children. (3) Now charged to Building Account. (4) No attempt has been made in this summary to charge high and special schools with their proportionate share of the cost of supervision and of the other items marked (4). (5) Beginning with 1907-08 charged to Normal College, Department of Child Study and Schools for Crippled Children.					
NORMAL COLLEGE, HIGH AND SPECIAL SCHOOLS.					
Chicago Normal College.....	\$ 87,113.47	\$ 104,092.27	\$ 100,269.33	\$ 117,683.57	\$ 134,777.62
High schools.....	615,614.93	631,532.26	902,564.83	1,351,736.40	1,804,471.97
.....	106,081.23	114,859.04	211,061.36	.....	.....
.....	78,223.76	77,082.93	86,818.51	80,521.29	80,347.17
.....	20,806.34	26,630.12	30,546.55	26,873.58	25,867.37
.....	23,606.26	25,618.06	30,474.07	33,753.96	42,078.12
Schools for the Deaf.....	4,480.97	4,738.97	5,827.41	6,873.12	7,380.92
Schools for the Blind.....	7,091.13	11,301.04	25,037.69	27,887.91	28,047.74
Schools for Crippled Children.....	118,750.97	133,040.08	156,807.94	163,622.00	221,370.52
Evening schools.....	.....	.....	.....	11,035.28	26,307.18
Social centers.....	.....	.....	.....	23,630.77	33,831.48
Vacation schools.....	5,000.00	10,550.00	27,054.28	.....	15,015.76
Summer high schools.....	.....	.....	.....	.....	4,645.74
Schools for Apprentices.....	.....	.....	.....	.....	.....
Total Normal College, High and Special Schools.....	\$1,075,782.06	\$ 1,200,065.97	\$ 1,578,854.02	\$ 1,843,147.88	\$ 2,495,740.53
Total Expenditures for Educational Purposes.....	\$7,451,493.73	\$ 8,007,811.55	\$ 9,159,017.86	\$10,189,610.60	\$12,137,631.76
Cost per pupil in entire system, based on average membership (not including evening and vacation schools and social centers).....	\$ 30.02	\$ 32.43	\$ 36.15	\$ 39.01	\$ 42.82

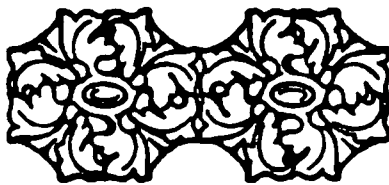
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